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U.S. DEPARTMENT OF COMMERCE / Environmental Science Services Administration

Environmental Data Service

KEY TO METEOROLOGICAL RECORDS DOCUMENTATION NO. 5.314

PENNSYLVANIA STATE UNIVERSITY
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DOCUMENTS COLLECTION

Catalog of Meteorological Satellite Data—ESSA 3 and ESSA 5 Television Cloud Photography

April 4-June 30, 1967

PURPOSE

The Key to Meteorological Records Documentation Series has been established to provide guidance information to research personnel making use of climatological data.

Frequently users of such data have found it necessary to spend a great deal of time establishing whether the criteria for observing or computing various elements have changed over the period of record or in what form the data are available.

It is therefore hoped that the presentation of this series may not only conserve valuable time but may have a direct influence in improving the accuracy of research results.

EARLIER TIROS AND ESSA DATA CATALOGS

Earlier catalogs of TIROS and ESSA Meteorological Satellite data are available in this series, as follows:

No. 5.31	"Catalogue of Meteorological Satellite Data - TIROS I Television Cloud Photography", published in 1961, price 70 cents.
No. 5.32	"Catalogue of Meteorological Satellite Data - TIROS II Television Cloud Photography", published in 1963, price 20 cents.
No. 5.33	"Catalogue of Meteorological Satellite Data - TIROS III Television Cloud Photography", published in 1962, price 70 cents.
No. 5.34	"Catalogue of Meteorological Satellite Data - TIROS IV Television Cloud Photography", published in 1963, price $1.00.
No. 5.35	"Catalogue of Meteorological Satellite Data - TIROS V Television Cloud Photography", published in 1964, price $1.75.
No. 5.36	"Catalogue of Meteorological Satellite Data - TIROS VI Television Cloud Photography", published in 1964, price $2.00.
No. 5.37	"Catalogue of Meteorological Satellite Data - TIROS VII Television Cloud Photography Part 1 June 19, 1963 to December 31, 1963", published in 1965, price $1.25.
No. 5.37	"Catalogue of Meteorological Satellite Data - TIROS VII Television Cloud Photography Part 2 January 1, 1964 to June 30, 1964", published in 1965, price $1.00.
No. 5.37	"Catalogue of Meteorological Satellite Data - TIROS VII Television Cloud Photography Part 3 July 1, 1964 to December 30, 1964", published in 1965, price $1.00.
No. 5.37	"Catalogue of Meteorological Satellite Data - TIROS VII Television Cloud Photography Part 4 January 1, 1965 to December 31, 1965", published in 1966, price 45 cents.
No. 5.38	"Catalogue of Meteorological Satellite Data - TIROS VIII Television Cloud Photography Part 1 December 21, 1963 to June 30, 1964", published in 1965, price $1.00.
No. 5.38	"Catalogue of Meteorological Satellite Data - TIROS VIII Television Cloud Photography Part 2 July 1, 1964 to December 31, 1964", published in 1965, price $1.00.
No. 5.38	"Catalogue of Meteorological Satellite Data - TIROS VIII Television Cloud Photography Part 3 January 1, 1965 to August 31, 1965", published in 1966, price 45 cents.

(Continued on inside of back cover.)

U.S. DEPARTMENT OF COMMERCE
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PREFACE

This issue in the series of catalogs describing the television cloud photographs obtained by meteorological satellites includes material taken from both ESSA 3 and ESSA 5. It covers the period of April, May, and June 1967. The maps and listings generally follow the pattern established in the "Catalog of Meteorological Satellite Data - TIROS I Television Cloud Photography," published as No. 5.31 in the Environmental Data Service Series *Key to Meteorological Records Documentation*. However, digitized cloud maps replace the manually constructed nephanalyses which had been used in previous catalogs. There are two maps for each day; the first polar stereographic projection in each set is for the Northern Hemisphere and the second for the Southern Hemisphere. These maps are arranged according to pass day.

Documentation Section
National Environmental Satellite Center

USING THE CATALOG

1. Scan the digitized cloud maps for areas of particular interest.
2. When a picture of interest is located, the film can be ordered by date from the National Weather Records Center, Asheville, N. C., at a cost of $8.50 per day.
3. Information for a particular pass, such as start time, subsatellite point (the point where the local vertical through the satellite intersects the earth's surface), and track number, may be determined by using the tabulated listings preceding the digitized cloud maps.

CATALOG OF METEOROLOGICAL SATELLITE DATA - ESSA 3 and ESSA 5 TELEVISION CLOUD PHOTOGRAPHY

April 1, 1967 to June 30, 1967

The ESSA 3 meteorological satellite, launched on October 2, 1966 by the National Aeronautics and Space Administration, is the third Environmental Survey Satellite in the TIROS Operational (TOS) System. ESSA 3 was put into a nearly circular, sun-synchronous polar orbit, approximately 892 statute miles above the earth's surface with an apogee of 925 statute miles and a perigee of 859 statute miles. The orbit is inclined 79° (Retrograde) to the equatorial plane with a nodal period of 114.5 minutes which corresponds to slightly more than 13 circuits of the earth each day.

ESSA 3 is a TIROS type satellite in a "cartwheel" configuration which allows earth-oriented picture coverage. The spacecraft is spin-stabilized and magnetically torqued to a wheel attitude, so that the spin axis is normal to the plane of the orbit and the radially mounted cameras view the earth once during each spacecraft revolution about its axis.

The cameras in the ESSA 3 satellite are one inch diameter vidicons (television camera tube) of the Advanced Vidicon Camera System (AVCS) type. Each picture covers an area of approximately 4,000,000 square miles. One camera provides full global coverage, therefore, two cameras provide full system redundancy.

Each of the cameras can independently take pictures and store them for later playback to one of the Command-and-Data-Acquisition (CDA) stations which are located at Wallops Station near Chincoteague, Va., and Gilmore Creek, Fairbanks, Alaska.

Pictures, taken every 260 seconds, are usually obtained in sequences of twelve frames to a pass. Each frame is electronically gridded by computer with latitude and longitude lines and geographic outlines merged with the picture. An identification legend underneath each picture provides the following information: year, month, day, hour, minute and second of picture taking time; track and zone numbers; station initial; satellite number; mode; camera; latitude of a labeled grid intersection near the picture center; latitude spacing of grids in degrees; longitude of a labeled grid intersection near the picture center; longitude spacing of grids in degrees; pass number; frame number; and sun glint position. The picture, figure 1, is located in the area of track 4 (TABLE 1) zone 58 (not referenced), with the latitude and longitude point of the picture located at 25°N and 105°W. The grids are spaced 5° both in latitude and longitude and sun glint is shown in the picture at 10°N and 109°W.

For ESSA 3 the system of "TRACKS" is used to identify the general geographic areas over which picture sequences were taken. These tracks are listed in the ESSA 3 track table (TABLE 1) which appears in this catalog immediately following the tabulated listings. The track boundaries are parallel to the path followed by the subsatellite point during the daylight portion of each orbital pass. The width of each track is exactly equal to the amount the earth rotates between consecutive passes. Thus, in general, the subsatellite point makes one traverse along each track each day (from midnight to midnight, GMT). The track boundaries are fixed permanently for the life of ESSA 3, and are arbitrarily referenced to the point 0° latitude, 0° longitude, with track numbers increasing westward.

Since the ESSA 3 orbital period of 114.5 minutes is not an exact submultiple of 24 hours, the satellite starts 12 and 13 passes on alternate days. This results in track 13 being much narrower than the others and, thus, it is not traversed every day. There are also days on which one particular track is traversed just after GMT midnight, and again later the same day just before GMT midnight.

The ESSA 5 meteorological satellite, launched on April 20, 1967, has characteristic features similar to ESSA 3. When pictures from ESSA 5 more nearly fit the operational requirements for data they are combined with pictures from ESSA 3 in the digitized cloud maps.

ESSA 5, like ESSA 3, was put into a nearly circular polar orbit, approximately 892 statute miles above the earth's surface, with an apogee of 922 statute miles and a perigee

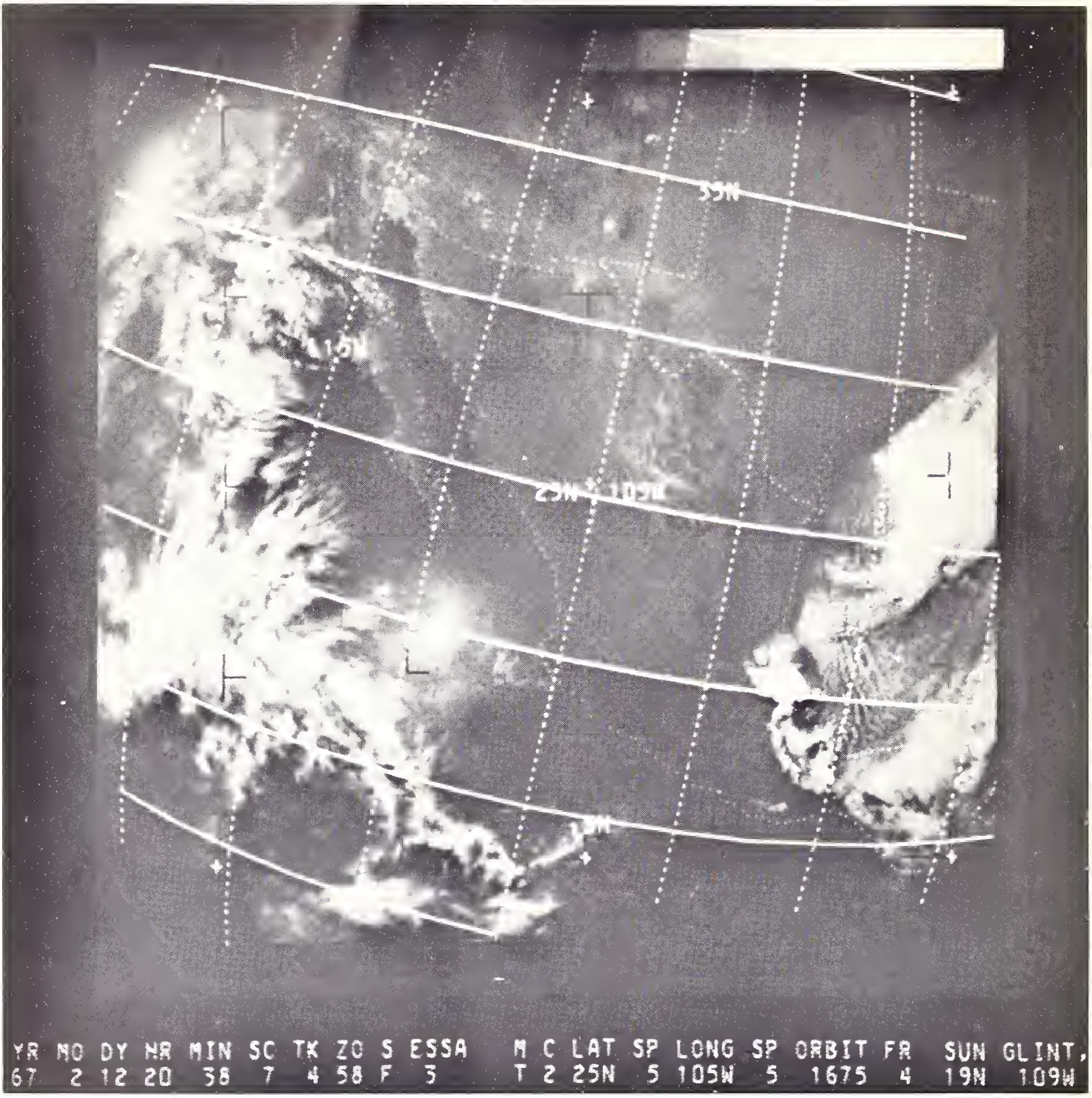
35N
25N 109W
YR MO DY HR MIN SC TK ZO S ESSA M C LAT SP LONG SP ORBIT FR SUN GLINT,
67 2 12 20 38 7 4 58 F 3 T 2 25N 5 105W 5 1675 4 19N 109W

Figure 1 - Example of ESSA 3 Cloud Photography
ESSA 5 similar

of 861 statute miles. The orbit inclines 78.42° to the equatorial plane with an orbital period of 113.6 minutes which corresponds to 12.7 passes around the earth each day.

The cameras in the ESSA 5 satellite are of the same design as those in the ESSA 3 satellite. Picture coverage of the entire sunlit area of the earth is possible each day. Each camera can independently take pictures and store them on tape for later playback to a CDA station in the same manner as ESSA 3 photos.

Pictures, taken at 260 seconds, are in sequences of 6 or 12 frames to a pass, each frame being electronically gridded to show latitude, longitude and geographic outlines on the picture. The grids are generally spaced at 5° intervals of latitude and longitude. The identification legend underneath each picture supplies all pertinent information.

The "track" system of ESSA 5 is similar to that of ESSA 3 and track boundaries are fixed for the life of the satellite. They are used to identify the geographic areas over which picture sequences were taken. These tracks are listed in the ESSA 5 track table (TABLE 2) which immediately follows the ESSA 3 track table (TABLE 1).

Since the ESSA 5 orbital period of 113.6 minutes is not an exact multiple of 24 hours, the satellite starts 12 and 13 passes on alternate days. This results in track 13 being much narrower than the others and, thus, is not traversed every day. There also are days on which one particular track is traversed just after GMT midnight, and again later the same day just before GMT midnight.

On the film reels, picture sequences are grouped together by track number and assembled in chronological order. Track numbers are stamped on the film immediately preceding the sequence to which they apply.

The following pages of tabulated listings give descriptive information about the pictures obtained by ESSA 3 and ESSA 5. In the listings each picture sequence is described by one line, and the sequences are grouped together by date and track number. This is the order in which they appear on the film reel. The column headings and entries have the following meanings:

PASS:	Orbital pass number on which the pictures were taken. On the digitized cloud maps in this catalog, these numbers appear beneath the date in the lower right corner of the page.
TRACK:	Defines the geographic area which contains the path of the subsatellite point. The entries refer to TABLES 1 and 2.
C:	Camera number indicated in the legend. 1 = Camera number one 2 = Camera number two
S:	Command-and-Data-Acquisition (CDA) station which received the sequence. W = Wallops Station, Va. F = Fairbanks, Alaska
ALONG:	Longitude of ascending node (equator crossing)
MODA:	Month and day on which the pictures were taken.
HRMNSE:	Time in hours, minutes and seconds of the first picture taken.

SUBSATELLITE POINT PICTURE LOCATION: Indicates the latitude in degrees of the subsatellite point for each of the twelve frames in the orbital pass sequence. First latitude column corresponds to picture frame No. 12

The digitized cloud maps that appear in this catalog are prepared by a high speed digital computer. In this process the signals comprising the picture taken by the satellite are assigned numerical values to indicate the relative brightness of each element. These data are normalized brightness, earth-located and repositioned on standard map projection. Magnetic tapes are reproduced for input to a cathode ray tube film display device. These digitized cloud maps are constructed so that the overlap of day, 24 hours apart, is positioned in an area between 80 and 60 degrees East. On some days, the first pass of the mosaic day is the same as the last pass of the previous day to keep the 24 hour break in the required area. A detailed description of the procedures used to produce these digitized cloud maps is contained in reference 1; a condensed and edited version of this same article appears in reference 2. The photographic product, resulting from this computer processing, consists of 16 images; eight polar stereographic octants, 6 Mercator segments and two reduced polar hemispheric chips for each day. The digitized cloud maps are the reduced resolution northern and southern polar hemispheric chips in which latitude and longitude lines are spaced at 10° intervals. In some instances, blank areas and mislocated clouds appear on the digitized cloud maps which are irregularities of the computer operation and should be disregarded. The date appears in the lower right corner of the page along with inclusive pass numbers for the day.

The ESSA 3 and ESSA 5 master films are deposited at the National Weather Records Center (NWRC), Environmental Science Services Administration, Federal Building, Asheville, North Carolina 28801. Persons or institutions desiring copies may order them from the NWRC in the form of 35 mm. positive transparencies for projection or 35 mm. duplication negatives from which opaque copies can be made. Pictures are ordered by date at a cost of $8.50 per day which includes the digitized computer maps for each day ordered (16 film chips per day). These digitized computer maps are also available separately on 100 foot reels, at $8.50 per reel, with each reel containing approximately 22 days of the film chips. All copies will be furnished with sprocket holes since the necessary film emulsion is available only in this form. It is not yet possible to furnish copies of individual frames or to provide enlargements or other picture formats.

Available also from the NWRC, for the cost of reproduction, are reels of microfilmed nephanalysis charts for TIROS I thru ESSA 1.

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REFERENCES

1. Bristor, C. L., Callicott, W. M., and Bradford, R. E.: "Operational Processing of Satellite Cloud Pictures by Computer," Monthly Weather Review, 94(8), August 1966, pp. 515-527.

2. U. S. Department of Commerce, Environmental Science Services Administration, Environmental Data Service, "Catalog of Meteorological Satellite Data - ESSA 3 Television Cloud Photography, Part 2,January 1, 1967 to March 31, 1967." KMRD No. 5.313, Washington, D. C., 1967.

PASS	TRACK	C	S	ALON	MODA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
2272	11	2	F	69E	0401	084930	73S	62S	49S	36S	23S	10S	2N	16N	29N	42N	56N	68N
2273	12	2	F	41E	0401	104426	73S	61S	49S	36S	22S	9S	3N	17N	30N	43N	56N	69N
2274	13	2	F	12E	0401	123906	73S	61S	49S	36S	23S	9S	3N	16N	30N	43N	56N	68N
2275	1	2	F	17W	0401	143330	73S	62S	49S	36S	23S	10S	2N	16N	29N	42N	55N	68N
2276	2	2	F	45W	0401	162757	74S	62S	50S	37S	24S	11S	2N	15N	28N	42N	55N	67N
2277	3	2	F	74W	0401	182227	74S	63S	50S	37S	24S	11S	1N	15N	28N	41N	54N	67N
2278	4	2	F	103W	0401	201701	74S	63S	51S	38S	25S	11S	1N	14N	28N	41N	54N	67N
2279	5	2	F	131W	0401	221137	74S	63S	51S	38S	25S	11S	1N	14N	28N	41N	54N	67N
2280	6	2	F	160W	0402	000618	74S	63S	51S	38S	25S	11S	1N	14N	28N	41N	54N	67N
2281	7	2	W	171E	0402	020058	74S	63S	51S	38S	24S	11S	1N	15N	28N	41N	54N	67N
2282	8	2	W	143E	0402	035541	74S	63S	50S	37S	24S	11S	1N	15N	28N	41N	55N	67N
2283	9	2	W	114E	0402	055027	74S	62S	50S	37S	24S	11S	2N	15N	29N	42N	55N	67N
2284	10	2	W	85E	0402	074516	73S	62S	49S	36S	23S	10S	2N	16N	29N	42N	56N	68N
2285	11	2	F	57E	0402	094008	73S	61S	49S	36S	23S	9S	3N	16N	30N	43N	56N	69N
2286	12	2	F	28E	0402	113503	72S	61S	48S	35S	22S	8S	4N	17N	31N	44N	57N	69N
2287	1	2	F	1W	0402	132943	72S	61S	48S	35S	22S	9S	4N	17N	30N	43N	56N	69N
2288	2	2	F	29W	0402	152407	73S	61S	49S	36S	23S	9S	3N	16N	30N	43N	56N	68N
2289	3	2	F	58W	0402	171834	73S	62S	49S	36S	23S	10S	2N	16N	29N	42N	55N	68N
2290	4	2	F	87W	0402	191304	73S	62S	50S	37S	24S	10S	2N	15N	29N	42N	55N	67N
2291	5	2	F	115W	0402	210737	74S	63S	50S	37S	24S	11S	2N	15N	28N	42N	55N	67N
2292	6	2	F	144W	0402	230213	74S	63S	50S	37S	24S	11S	1N	15N	28N	41N	55N	67N
2293	7	2	F	173W	0403	005648	74S	63S	50S	37S	24S	11S	1N	15N	28N	41N	54N	67N
2294	8	2	W	159E	0403	025129	74S	63S	50S	37S	24S	11S	1N	15N	28N	41N	55N	67N
2295	9	2	W	130E	0403	044612	74S	63S	50S	37S	24S	11S	2N	15N	28N	42N	55N	67N
2296	10	2	W	101E	0403	064059	73S	62S	50S	37S	24S	10S	2N	16N	29N	42N	55N	68N
2297	11	2	W	73E	0403	083548	73S	62S	49S	36S	23S	10S	3N	16N	29N	43N	56N	68N
2298	12	2	F	44E	0403	103041	73S	61S	48S	35S	22S	9S	3N	17N	30N	44N	57N	69N
2299	13	2	F	15E	0403	122521	72S	61S	48S	36S	22S	9S	3N	17N	30N	43N	56N	68N
2300	1	2	F	13W	0403	141945	73S	62S	49S	36S	23S	10S	2N	16N	29N	42N	55N	68N
2301	2	2	F	42W	0403	161412	73S	62S	50S	37S	24S	10S	2N	15N	29N	42N	55N	67N
2302	3	2	F	71W	0403	180842	74S	63S	50S	37S	24S	11S	1N	15N	28N	41N	55N	67N
2303	4	2	F	99W	0403	200316	74S	63S	50S	37S	24S	11S	1N	15N	28N	41N	54N	67N
2304	5	2	F	128W	0403	215752	74S	63S	51S	38S	24S	11S	1N	14N	28N	41N	54N	67N
2305	6	2	F	157W	0403	235220	74S	64S	51S	38S	25S	12S	1N	14N	27N	41N	54N	66N
2306	7	2	W	175E	0404	014700	74S	63S	51S	38S	25S	12S	1N	14N	27N	41N	54N	66N
2307	8	2	W	146E	0404	034144	74S	63S	51S	38S	25S	11S	1N	14N	28N	41N	54N	67N
2308	9	2	W	117E	0404	053631	74S	63S	50S	37S	24S	11S	1N	15N	28N	42N	55N	67N
2309	10	2	W	89E	0404	073120	74S	62S	50S	37S	24S	10S	2N	15N	29N	42N	55N	68N
2310	11	2	F	60E	0404	092613	73S	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	68N
2311	12	2	F	31E	0404	112109	72S	61S	48S	35S	22S	9S	4N	17N	30N	44N	57N	69N
2312	13	2	F	3E	0404	131548	72S	61S	48S	35S	22S	9S	3N	17N	30N	43N	56N	69N
2313	1	2	F	26W	0404	151013	73S	62S	49S	36S	23S	10S	3N	16N	29N	43N	56N	68N
2314	2	2	F	55W	0404	170440	73S	62S	50S	37S	24S	10S	2N	15N	29N	42N	55N	68N
2315	3	2	F	83W	0404	185910	74S	63S	50S	37S	24S	11S	2N	15N	28N	42N	55N	67N
2316	4	2	F	112W	0404	205343	74S	63S	50S	37S	24S	11S	1N	15N	28N	41N	54N	67N
2317	5	2	F	141W	0404	224820	74S	63S	50S	37S	24S	11S	1N	15N	28N	41N	54N	67N
2318	6	2	F	169W	0405	004250	74S	63S	51S	38S	25S	12S	1N	14N	28N	41N	54N	67N
2319	7	2	W	162E	0405	023731	74S	63S	51S	38S	25S	11S	1N	14N	28N	41N	54N	67N
2320	8	2	W	133E	0405	043215	74S	63S	50S	38S	24S	11S	1N	15N	28N	41N	54N	67N
2321	9	2	W	105E	0405	062701	74S	63S	50S	37S	24S	11S	2N	15N	28N	42N	55N	67N
2322	10	2	W	76E	0405	082151	73S	62S	50S	37S	23S	10S	2N	16N	29N	42N	55N	68N
2323	11	2	F	47E	0405	101644	73S	61S	49S	36S	23S	9S	3N	16N	30N	43N	56N	69N
2324	12	2	F	19E	0405	121122	73S	62S	49S	36S	23S	10S	3N	16N	29N	43N	56N	68N
2325	1	2	F	10W	0405	140546	73S	62S	50S	37S	24S	10S	2N	15N	29N	42N	55N	67N
2326	2	2	F	39W	0405	160013	74S	63S	50S	37S	24S	11S	1N	15N	28N	41N	54N	67N
2327	3	2	F	67W	0405	175443	74S	63S	51S	38S	25S	11S	1N	14N	28N	41N	54N	67N
2328	4	2	F	96W	0405	194917	74S	63S	51S	38S	25S	12S	1N	14N	27N	41N	54N	66N
2329	5	2	F	125W	0405	214353	74S	64S	51S	38S	25S	12S	1N	14N	27N	41N	54N	66N
2330	6	2	F	153W	0405	233822	75S	64S	52S	39S	26S	12S	0N	13N	27N	40N	53N	66N
2331	7	2	W	178E	0406	013303	75S	64S	51S	39S	25S	12S	0N	14N	27N	40N	53N	66N
2332	8	2	W	149E	0406	032746	75S	64S	51S	38S	25S	12S	0N	14N	27N	41N	54N	66N
2333	9	2	W	121E	0406	052233	74S	63S	51S	38S	25S	11S	1N	14N	28N	41N	54N	67N
2334	9	2	W	91E	0406	052233	76S	64S	52S	39S	26S	13S	1N	14N	28N	41N	54N	67N
2335	11	2	F	63E	0406	091215	73S	62S	50S	37S	23S	10S	2N	16N	29N	42N	56N	68N
2336	12	2	F	35E	0406	110713	73S	61S	49S	36S	22S	9S	3N	17N	30N	43N	57N	69N
2337	13	2	F	6E	0406	130210	72S	60S	48S	35S	22S	8S	4N	18N	31N	44N	57N	70N
2338	1	2	F	23W	0406	145650	72S	60S	48S	35S	22S	8S	4N	17N	31N	44N	57N	69N
2339	2	2	F	51W	0406	165114	73S	61S	49S	36S	22S	9S	3N	16N	30N	43N	56N	68N
2340	3	2	F	80W	0406	184532	73S	62S	50S	37S	24S	10S	2N	15N	29N	42N	55N	68N
2341	4	2	F	109W	0406	204000	74S	63S	50S	37S	24S	11S	2N	15N	28N	42N	55N	67N
2342	5	2	F	137W	0406	223432	74S	63S	50S	38S	24S	11S	1N	15N	28N	41N	54N	67N
2343	6	2	F	166W	0407	002906	74S	63S	51S	38S	25S	11S	1N	14N	28N	41N	54N	67N
2344	7	2	W	165E	0407	022344	74S	63S	51S	38S	25S	11S	1N	14N	28N	41N	54N	67N
2345	8	2	W	137E	0407	041825	74S	63S	51S	38S	25S	11S	1N	15N	28N	41N	54N	67N
2346	9	2	W	108E	0407	061308	74S	63S	50S	37S	24S	11S	1N	15N	28N	41N	55N	67N

PASS	TRACK	C	S	ALON	MODA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
2347	10	2	W	79E	0407	000755	74S	63S	50S	37S	24S	11S	2N	15N	29N	42N	55N	68N
2348	11	2	F	51E	0407	100245	73S	62S	49S	36S	23S	10S	2N	16N	29N	43N	56N	68N
2349	12	2	F	22E	0407	115722	73S	62S	50S	37S	24S	10S	2N	15N	29N	42N	55N	68N
2350	1	2	F	7W	0407	135146	74S	63S	50S	37S	24S	11S	1N	15N	28N	41N	54N	67N
2351	2	2	F	35W	0407	154613	74S	63S	51S	38S	25S	12S	1N	14N	27N	41N	54N	66N
2352	3	2	F	64W	0407	174043	75S	64S	51S	38S	25S	12S	0N	14N	27N	40N	53N	66N
2353	4	2	F	93W	0407	193517	75S	64S	52S	39S	26S	12S	0N	13N	27N	40N	53N	66N
2354	5	2	F	121W	0407	212953	75S	64S	52S	39S	26S	12S	0N	13N	27N	40N	53N	66N
2355	6	2	F	150W	0407	232430	75S	64S	52S	39S	26S	12S	0N	13N	27N	40N	53N	66N
2356	7	2	W	179W	0408	011911	75S	64S	52S	39S	26S	12S	0N	13N	27N	40N	53N	66N
2357	8	2	W	153E	0408	031355	75S	64S	51S	38S	25S	12S	0N	14N	27N	40N	54N	66N
2358	9	2	W	124E	0408	050842	74S	63S	51S	38S	25S	12S	1N	14N	28N	41N	54N	67N
2359	10	2	W	95E	0408	070332	74S	63S	50S	37S	24S	11S	1N	15N	28N	42N	55N	67N
2360	11	2	F	67E	0408	085825	74S	62S	50S	37S	24S	10S	2N	16N	29N	42N	55N	68N
2361	12	2	F	38E	0408	105321	73S	61S	49S	36S	23S	9S	3N	16N	30N	43N	56N	69N
2362	13	2	F	9E	0408	124802	73S	61S	49S	36S	23S	10S	3N	16N	29N	43N	56N	68N
2363	1	2	F	19W	0408	144226	73S	62S	50S	37S	24S	10S	2N	15N	29N	42N	55N	68N
2364	2	2	F	48W	0408	163653	74S	63S	50S	37S	24S	11S	1N	15N	28N	42N	55N	67N
2365	3	2	F	77W	0408	183123	74S	63S	51S	38S	25S	11S	1N	14N	28N	41N	54N	67N
2366	4	2	F	105W	0408	202556	74S	63S	51S	38S	25S	12S	1N	14N	28N	41N	54N	67N
2367	5	2	F	134W	0408	222033	74S	63S	51S	38S	25S	12S	1N	14N	27N	41N	54N	67N
2368	6	2	F	163W	0409	001458	75S	64S	52S	39S	26S	12S	0N	13N	27N	40N	53N	66N
2369	7	2	W	169E	0409	020938	75S	64S	52S	39S	26S	12S	0N	13N	27N	40N	53N	66N
2370	8	2	W	140E	0409	040421	75S	64S	51S	38S	25S	12S	0N	14N	27N	41N	54N	66N
2371	9	2	W	111E	0409	055906	74S	64S	51S	38S	25S	12S	1N	14N	28N	41N	54N	67N
2372	10	2	W	83E	0409	075355	74S	63S	51S	38S	24S	11S	01N	15N	28N	41N	62N	67N
2373	11	2	F	54E	0409	094847	74S	62S	50S	37S	24S	10S	2N	15N	29N	42N	55N	68N
2374	12	2	F	25E	0409	114326	74S	63S	50S	37S	24S	11S	2N	15N	28N	42N	55N	67N
2375	1	2	F	3W	0409	133750	74S	63S	51S	38S	25S	11S	1N	14N	28N	41N	54N	67N
2376	2	2	F	32W	0409	153217	75S	64S	51S	38S	25S	12S	0N	14N	27N	40N	54N	66N
2377	3	2	F	61W	0409	172647	75S	64S	52S	39S	26S	12S	0N	13N	27N	40N	53N	66N
2378	4	2	F	89W	0409	192111	75S	65S	52S	40S	26S	13S	0N	13N	26N	39N	52N	65N
2379	5	2	F	118W	0409	211544	76S	65S	53S	40S	27S	14S	0N	12N	26N	39N	52N	65N
2380	6	2	F	147W	0409	231020	76S	65S	53S	40S	27S	14S	0N	12N	26N	39N	52N	65N
2381	7	2	F	175W	0410	010500	76S	65S	53S	40S	27S	14S	0N	12N	26N	39N	52N	65N
2382	8	2	W	156E	0410	025942	76S	65S	53S	40S	27S	13S	0N	12N	26N	39N	52N	65N
2383	9	2	W	127E	0410	045428	75S	65S	52S	39S	26S	13S	0N	13N	26N	40N	53N	65N
2384	10	2	W	99E	0410	064916	75S	64S	52S	39S	26S	12S	0N	13N	27N	40N	53N	66N
2385	11	2	F	70E	0410	084408	75S	64S	51S	38S	25S	12S	1N	14N	28N	41N	54N	67N
2386	12	2	F	41E	0410	103903	74S	63S	50S	37S	24S	11S	2N	15N	28N	42N	55N	67N
2387	13	2	F	13E	0410	123436	72S	60S	48S	35S	21S	8S	4N	18N	31N	45N	58N	70N
2388	1	2	F	16W	0410	142937	71S	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	71N
2389	2	2	F	45W	0410	162417	71S	59S	47S	34S	20S	7S	5N	19N	32N	45N	58N	70N
2390	3	2	F	73W	0410	181842	71S	60S	47S	34S	21S	8S	5N	18N	31N	45N	58N	70N
2391	4	2	F	102W	0410	201309	72S	60S	48S	35S	22S	8S	4N	17N	31N	44N	57N	69N
2392	5	2	F	131W	0410	220739	72S	61S	48S	35S	22S	9S	4N	17N	30N	44N	57N	69N
2393	6	2	F	159W	0411	000214	72S	61S	48S	35S	22S	9S	3N	17N	30N	44N	57N	69N
2394	7	2	W	172E	0411	015650	73S	61S	48S	36S	22S	9S	3N	17N	30N	44N	57N	69N
2395	8	2	W	143E	0411	035130	72S	61S	48S	35S	22S	9S	3N	17N	30N	44N	57N	69N
2396	9	2	W	115E	0411	054613	72S	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N
2397	10	2	W	86E	0411	074059	72S	60S	48S	35S	22S	8S	4N	18N	31N	44N	57N	70N
2398	11	2	F	57E	0411	093548	72S	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N
2399	12	2	F	29E	0411	113040	71S	59S	47S	34S	20S	7S	5N	19N	32N	46N	59N	71N
2400	1	2	F	0W	0411	132517	71S	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N
2401	2	2	F	29W	0411	151942	72S	60S	48S	35S	21S	8S	4N	18N	31N	44N	57N	70N
2402	3	2	F	57W	0411	171409	72S	61S	48S	35S	22S	9S	4N	17N	30N	44N	57N	69N
2403	4	2	F	86W	0411	190839	73S	61S	49S	36S	22S	9S	3N	17N	30N	43N	56N	69N
2404	5	2	F	115W	0411	210312	73S	61S	49S	36S	23S	9S	3N	16N	30N	43N	56N	69N
2405	6	2	F	143W	0411	225749	73S	62S	49S	36S	23S	9S	3N	16N	30N	43N	56N	69N
2406	7	2	F	172W	0412	005224	73S	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	68N
2407	8	2	W	159E	0412	024705	73S	62S	49S	36S	23S	9S	3N	16N	30N	43N	56N	69N
2408	9	2	W	131E	0412	044149	73S	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	69N
2409	10	2	W	102E	0412	063636	72S	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N
2410	11	2	W	73E	0412	083126	72S	60S	48S	35S	22S	8S	4N	18N	31N	44N	58N	70N
2411	12	2	F	45E	0412	102619	71S	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N
2412	13	2	F	16E	0412	122058	71S	60S	47S	34S	21S	8S	5N	18N	31N	45N	58N	70N
2413	1	2	F	13W	0412	141522	72S	60S	48S	35S	22S	8S	4N	17N	31N	44N	57N	69N
2414	2	2	F	41W	0412	160949	72S	61S	48S	35S	22S	9S	3N	17N	30N	43N	57N	69N
2415	3	2	F	70W	0412	180419	73S	61S	49S	36S	23S	9S	3N	16N	30N	43N	56N	69N
2416	4	2	F	99W	0412	195853	73S	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	68N
2417	5	2	F	127W	0412	215329	73S	62S	49S	36S	23S	10S	3N	16N	29N	43N	56N	68N
2418	6	2	F	156W	0412	234803	73S	62S	49S	37S	23S	10S	2N	16N	29N	43N	56N	68N
2419	7	2	W	175E	0413	014244	73S	62S	49S	36S	23S	10S	3N	16N	29N	43N	56N	68N
2420	8	2	W	147E	0413	033728	73S	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	69N
2421	9	2	W	118E	0413	053214	73S	61S	49S	36S	23S	9S	3N	17N	30N	43N	57N	69N

PASS	TRACK	C	S	ALON	MODA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
2422	10	2	W	89E	0413	072704	72S	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N
2423	11	2	F	61E	0413	092157	72S	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N
2424	12	2	F	32E	0413	111653	71S	59S	47S	34S	20S	7S	6N	19N	32N	46N	59N	71N
2425	13	2	F	3E	0413	131132	71S	59S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N
2426	1	2	F	25W	0413	150557	72S	60S	47S	34S	21S	8S	4N	18N	31N	45N	58N	70N
2427	2	2	F	54W	0413	170024	72S	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N
2428	3	2	F	83W	0413	185454	72S	61S	48S	35S	22S	9S	3N	17N	30N	44N	57N	69N
2429	4	2	F	111W	0413	204927	73S	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	69N
2430	5	2	F	140W	0413	224404	73S	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	69N
2431	6	2	F	169W	0414	003838	73S	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	69N
2432	7	2	W	163E	0414	023318	73S	62S	49S	36S	23S	9S	3N	16N	30N	43N	56N	69N
2433	8	2	W	134E	0414	042802	73S	61S	49S	36S	22S	9S	3N	17N	30N	44N	57N	69N
2434	9	2	W	105E	0414	062248	72S	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N
2435	10	2	W	77E	0414	081737	72S	60S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N
2436	11	2	F	48E	0414	101230	71S	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	71N
2437	12	2	F	19E	0414	120708	72S	60S	47S	34S	21S	8S	5N	18N	31N	45N	58N	70N
2438	1	2	F	9W	0414	140132	72S	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N
2439	2	2	F	38W	0414	155559	73S	61S	49S	36S	22S	9S	3N	17N	30N	43N	57N	69N
2440	3	2	F	67W	0414	175030	73S	62S	49S	36S	23S	9S	3N	16N	30N	43N	56N	69N
2441	4	2	F	95W	0414	194503	73S	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	68N
2442	5	2	F	124W	0414	213939	73S	62S	49S	36S	23S	10S	3N	16N	29N	43N	56N	68N
2443	6	2	F	153W	0414	233413	73S	62S	50S	37S	23S	10S	2N	16N	29N	43N	56N	68N
2444	7	2	W	179E	0415	012853	73S	62S	50S	37S	23S	10S	2N	16N	29N	43N	56N	68N
2445	8	2	W	150E	0415	032337	73S	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	68N
2446	9	2	W	121E	0415	051824	73S	61S	49S	36S	23S	9S	3N	17N	30N	43N	57N	69N
2447	10	2	W	93E	0415	071313	72S	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N
2448	11	2	F	64E	0415	090806	72S	60S	48S	35S	21S	8S	4N	18N	31N	45N	58N	70N
2449	12	2	F	35E	0415	110302	71S	59S	47S	34S	20S	7S	5N	19N	32N	46N	59N	71N
2450	13	2	F	7E	0415	125743	71S	59S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N
2451	1	2	F	22W	0415	145207	72S	60S	48S	35S	21S	8S	4N	18N	31N	45N	58N	70N
2452	2	2	F	51W	0415	164635	72S	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N
2453	3	2	F	79W	0415	184105	73S	61S	48S	35S	22S	9S	3N	17N	30N	44N	57N	69N
2454	4	2	F	108W	0415	203538	73S	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	69N
2455	5	2	F	137W	0415	223014	73S	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	69N
2456	6	2	F	165W	0416	002449	73S	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	69N
2457	7	2	W	166E	0416	021930	73S	62S	49S	36S	23S	9S	3N	16N	30N	43N	56N	69N
2458	8	2	W	137E	0416	041414	73S	61S	49S	36S	22S	9S	3N	17N	30N	44N	57N	69N
2459	9	2	W	109E	0416	060901	72S	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N
2460	10	2	W	80E	0416	080351	72S	60S	48S	35S	21S	8S	4N	18N	31N	45N	58N	70N
2461	11	2	F	51E	0416	095844	71S	60S	47S	34S	21S	7S	5N	19N	32N	45N	59N	71N
2462	12	2	F	23E	0416	115324	71S	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N
2463	1	2	F	6W	0416	134747	72S	60S	48S	35S	22S	8S	4N	17N	31N	44N	57N	69N
2464	2	2	F	35W	0416	154213	72S	61S	48S	35S	22S	9S	3N	17N	30N	44N	57N	69N
2465	3	2	F	63W	0416	173642	73S	62S	49S	36S	23S	9S	3N	16N	30N	43N	56N	69N
2466	4	2	F	92W	0416	193114	73S	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	68N
2467	5	2	F	121W	0416	212549	73S	62S	49S	36S	23S	10S	2N	16N	29N	43N	56N	68N
2468	6	2	F	149W	0416	232027	73S	62S	49S	36S	23S	10S	2N	16N	29N	43N	56N	68N
2469	7	2	W	178W	0417	011507	73S	62S	49S	36S	23S	10S	3N	16N	29N	43N	56N	68N
2470	8	2	W	153E	0417	030951	73S	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	69N
2471	9	2	W	125E	0417	050438	73S	61S	49S	36S	22S	9S	3N	17N	30N	44N	57N	69N
2472	10	2	W	96E	0417	065928	72S	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	70N
2473	11	2	F	67E	0417	085421	72S	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N
2474	12	2	F	39E	0417	104917	71S	59S	47S	34S	20S	7S	6N	19N	33N	46N	59N	71N
2475	13	2	F	10E	0417	124359	71S	59S	47S	34S	20S	7S	5N	19N	32N	45N	58N	71N
2476	1	2	F	19W	0417	143822	72S	60S	47S	34S	21S	8S	5N	18N	31N	45N	58N	70N
2477	2	2	F	47W	0417	163248	72S	61S	48S	35S	22S	8S	4N	17N	31N	44N	57N	69N
2478	3	2	F	76W	0417	182717	73S	61S	49S	36S	22S	9S	3N	17N	30N	44N	57N	69N
2479	4	2	F	105W	0417	202149	73S	61S	49S	36S	23S	9S	3N	17N	30N	43N	56N	69N
2480	5	2	F	133W	0417	221625	73S	62S	49S	36S	23S	9S	3N	16N	30N	43N	56N	69N
2481	6	2	F	162W	0418	001104	73S	62S	49S	36S	23S	9S	3N	16N	30N	43N	56N	69N
2482	7	2	W	169E	0418	020545	73S	61S	49S	36S	23S	9S	3N	17N	30N	43N	57N	69N
2483	8	2	W	141E	0418	040029	73S	61S	49S	36S	22S	9S	3N	17N	30N	44N	57N	69N
2484	9	2	W	112E	0418	055516	72S	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	70N
2485	10	1	W	83E	0418	075007	72S	60S	48S	35S	21S	8S	5N	18N	32N	45N	58N	70N
2486	11	1	F	55E	0418	094501	71S	60S	47S	34S	20S	7S	5N	19N	32N	46N	59N	71N
2487	12	1	F	26E	0418	113940	71S	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	70N
2488	1	1	F	3W	0418	133403	72S	60S	48S	35S	21S	8S	4N	18N	31N	44N	57N	70N
2489	2	1	F	31W	0418	152829	72S	61S	48S	35S	22S	9S	4N	17N	30N	44N	57N	69N
2490	3	1	F	60W	0418	172259	73S	61S	49S	36S	23S	9S	3N	17N	30N	43N	57N	69N
2491	4	1	F	89W	0418	191731	73S	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	69N
2492	5	1	F	117W	0418	211206	73S	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	69N
2493	6	1	F	146W	0418	230644	73S	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	69N
2494	7	1	F	175W	0419	010113	74S	62S	50S	37S	24S	10S	2N	16N	29N	43N	56N	68N
2495	8	1	W	157E	0419	025556	73S	62S	50S	37S	23S	10S	2N	16N	29N	43N	56N	68N
2496	9	1	W	128E	0419	045042	73S	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	69N

PASS	TRACK	C	S	ALON	MODA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
2497	10	1	W	99E	0419	064531	73S	61S	49S	36S	22S	9S	3N	17N	30N	44N	57N	69N
2498	11	1	F	71E	0419	084023	72S	61S	48S	35S	22S	8S	4N	18N	31N	44N	58N	70N
2499	12	1	F	42E	0419	103518	72S	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	71N
2500	13	1	F	13E	0419	123000	71S	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N
2501	1	1	F	15W	0419	142423	72S	61S	48S	35S	22S	8S	4N	17N	31N	44N	57N	70N
2502	2	1	F	44W	0419	161849	73S	61S	49S	36S	22S	9S	3N	17N	30N	44N	57N	69N
2503	3	1	F	73W	0419	181318	73S	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	69N
2504	4	1	F	101W	0419	200750	73S	62S	49S	36S	23S	10S	3N	16N	29N	43N	56N	68N
2505	5	1	F	130W	0419	220226	73S	62S	50S	37S	23S	10S	2N	16N	29N	43N	56N	68N
2506	6	1	F	159W	0419	235705	73S	62S	49S	37S	23S	10S	2N	16N	29N	43N	56N	68N
2507	7	1	W	173E	0420	015146	73S	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	69N
2508	8	1	W	144E	0420	034630	73S	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	69N
2509	9	1	W	115E	0420	054118	73S	61S	49S	36S	22S	9S	3N	17N	30N	44N	57N	69N
2510	10	1	W	87E	0420	074028	61S	48S	35S	22S	8S	4N	18N	31N	44N	58N	70N	78N
2511	11	1	F	58E	0420	093522	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	78N
2512	12	1	F	29E	0420	113018	59S	47S	33S	20S	7S	6N	19N	33N	46N	59N	71N	78N
2513	13	1	F	1E	0420	132500	59S	46S	33S	20S	7S	6N	19N	32N	46N	59N	71N	78N
2514	1	1	F	28W	0420	151923	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	78N
2515	2	1	F	57W	0420	171349	60S	48S	35S	22S	8S	4N	18N	31N	44N	57N	70N	78N
2516	3	1	F	85W	0420	190818	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N	78N
2517	4	1	F	114W	0420	210250	61S	49S	36S	22S	9S	3N	17N	30N	44N	57N	69N	78N
2518	5	1	F	143W	0420	225726	61S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2519	6	1	W	171W	0421	005157	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2520	7	1	W	160E	0421	024638	62S	49S	36S	23S	9S	3N	16N	30N	43N	56N	69N	78N
2521	8	1	W	131E	0421	044122	61S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2522	9	1	W	103E	0421	063609	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2523	10	1	W	74E	0421	083059	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2524	11	1	F	45E	0421	102552	60S	47S	34S	21S	7S	5N	19N	32N	45N	59N	71N	78N
2525	12	1	F	17E	0421	122031	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	78N
2526	1	1	F	12W	0421	141455	61S	48S	35S	22S	8S	4N	18N	31N	44N	57N	70N	78N
2527	2	1	F	41W	0421	160922	61S	49S	35S	22S	9S	4N	17N	30N	44N	57N	69N	78N
2528	3	1	F	69W	0421	180353	61S	49S	36S	23S	9S	3N	17N	30N	43N	57N	69N	78N
2529	4	1	F	98W	0421	195826	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2530	5	1	F	126W	0421	215302	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2531	6	1	F	155W	0421	234733	62S	50S	37S	23S	10S	2N	16N	29N	43N	56N	68N	78N
2532	7	1	W	176E	0422	014214	62S	50S	37S	23S	10S	2N	16N	29N	43N	56N	68N	78N
2533	8	1	W	148E	0422	033658	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2534	9	1	W	119E	0422	053145	62S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2535	10	1	W	90E	0422	072635	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2536	11	1	F	62E	0422	092128	60S	48S	35S	21S	8S	5N	18N	32N	45N	58N	70N	78N
2537	12	1	F	33E	0422	111624	60S	47S	34S	20S	7S	6N	19N	33N	46N	59N	71N	78N
2538	13	1	F	4E	0422	131105	59S	47S	34S	21S	7S	5N	19N	32N	45N	59N	71N	78N
2539	1	1	F	24W	0422	150524	60S	48S	35S	21S	8S	4N	18N	31N	45N	58N	70N	78N
2540	2	1	F	53W	0422	165956	61S	48S	35S	22S	8S	4N	17N	31N	44N	57N	70N	78N
2541	3	1	F	82W	0422	185427	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	69N	78N
2542	4	1	F	110W	0422	204900	61S	49S	36S	22S	9S	3N	17N	30N	44N	57N	69N	78N
2543	5	1	F	139W	0422	224337	61S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2544	6	1	W	168W	0423	003809	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2545	7	1	W	164E	0423	023250	62S	49S	36S	23S	9S	3N	17N	30N	43N	57N	69N	78N
2546	8	1	W	135E	0423	042734	61S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2547	9	1	W	106E	0423	062221	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2548	10	1	F	78E	0423	081711	61S	48S	35S	21S	8S	4N	18N	31N	45N	58N	70N	78N
2549	11	1	F	49E	0423	101149	61S	48S	35S	22S	8S	4N	18N	31N	44N	57N	70N	78N
2550	12	1	F	20E	0423	120613	61S	49S	36S	22S	9S	3N	17N	30N	44N	57N	69N	78N
2551	1	1	F	8W	0423	140040	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2552	2	1	F	37W	0423	155511	62S	50S	37S	23S	10S	2N	16N	29N	43N	56N	68N	78N
2553	3	1	F	66W	0423	174944	62S	50S	37S	24S	10S	2N	16N	29N	42N	56N	68N	78N
2554	4	1	F	94W	0423	194421	63S	50S	37S	24S	10S	2N	16N	29N	42N	56N	68N	78N
2555	5	1	F	123W	0423	213900	63S	50S	37S	24S	10S	2N	16N	29N	42N	56N	68N	78N
2556	6	1	F	152W	0423	233331	63S	50S	37S	24S	11S	2N	15N	29N	42N	55N	68N	77N
2557	7	1	W	180W	0424	012815	63S	50S	37S	24S	10S	2N	16N	29N	42N	56N	68N	78N
2558	8	1	W	151E	0424	032302	62S	50S	37S	23S	10S	2N	16N	29N	43N	56N	68N	78N
2559	9	1	W	122E	0424	051753	62S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2560	10	1	W	94E	0424	071247	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2561	11	1	F	65E	0424	090743	60S	48S	34S	21S	8S	5N	18N	32N	45N	58N	70N	78N
2562	12	1	F	36E	0424	110243	59S	46S	33S	20S	7S	6N	20N	33N	46N	60N	72N	78N
2563	13	1	F	8E	0424	125725	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	71N	78N
2564	1	1	F	21W	0424	145149	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	70N	78N
2565	2	1	F	50W	0424	164607	61S	48S	35S	22S	8S	4N	17N	31N	44N	57N	70N	78N
2566	3	1	F	78W	0424	184036	61S	49S	36S	22S	9S	4N	17N	30N	44N	57N	69N	78N
2567	4	1	F	107W	0424	203507	62S	49S	36S	23S	9S	3N	17N	30N	43N	57N	69N	78N
2568	5	1	F	136W	0424	222942	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2569	6	1	W	164W	0425	002419	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2570	7	1	W	167E	0425	021900	62S	49S	36S	23S	9S	3N	17N	30N	43N	57N	69N	78N
2571	8	1	W	138E	0425	041344	62S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N

PASS	TRACK	C	S	ALON	MODA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
2572	9	1	W	110E	0425	060831	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2573	10	1	W	81E	0425	080321	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2574	11	1	F	52E	0425	095814	60S	47S	34S	21S	7S	5N	19N	32N	46N	59N	71N	78N
2575	12	1	F	24E	0425	115252	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	78N
2576	1	1	F	5W	0425	134717	61S	48S	35S	22S	8S	4N	18N	31N	44N	57N	70N	78N
2577	2	1	F	34W	0425	154144	61S	49S	36S	22S	9S	4N	17N	30N	44N	57N	69N	78N
2578	3	1	F	62W	0425	173614	62S	49S	36S	23S	9S	3N	17N	30N	43N	57N	69N	78N
2579	4	1	F	91W	0425	193048	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2580	5	1	F	120W	0425	212524	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2581	6	1	F	148W	0425	232004	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2582	7	1	W	177W	0426	011440	62S	49S	36S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2583	8	1	W	154E	0426	030925	62S	49S	36S	23S	9S	3N	17N	30N	43N	57N	69N	78N
2584	9	1	W	126E	0426	050412	61S	49S	36S	22S	9S	4N	17N	31N	44N	57N	69N	78N
2585	10	1	W	97E	0426	065903	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2586	11	1	F	68E	0426	085357	60S	47S	34S	21S	7S	5N	19N	32N	45N	59N	71N	78N
2587	12	1	F	40E	0426	104854	59S	46S	33S	20S	7S	6N	20N	33N	46N	60N	72N	78N
2588	13	1	F	11E	0426	124335	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	71N	78N
2589	1	1	F	18W	0426	143759	60S	47S	34S	21S	7S	5N	18N	32N	45N	58N	71N	78N
2590	2	1	F	46W	0426	163226	60S	48S	35S	21S	8S	4N	18N	31N	45N	58N	70N	78N
2591	3	1	F	75W	0426	182657	61S	48S	35S	22S	8S	4N	18N	31N	44N	57N	70N	78N
2592	4	1	F	104W	0426	202120	62S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2593	5	1	F	132W	0426	221555	62S	49S	36S	23S	9S	3N	17N	30N	43N	57N	69N	78N
2594	6	1	F	161W	0427	001032	62S	49S	36S	23S	9S	3N	17N	30N	43N	57N	69N	78N
2595	7	1	W	170E	0427	020513	62S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2596	8	1	W	142E	0427	035957	61S	49S	36S	22S	9S	3N	17N	30N	44N	57N	69N	78N
2597	9	1	W	113E	0427	055444	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2598	10	1	W	84E	0427	074934	61S	48S	35S	21S	8S	5N	18N	32N	45N	58N	70N	78N
2599	11	1	F	56E	0427	094427	60S	47S	34S	21S	7S	5N	19N	32N	46N	59N	71N	78N
2600	12	1	F	27E	0427	113923	59S	46S	33S	20S	6S	6N	20N	33N	47N	60N	72N	78N
2601	1	1	F	2W	0427	133401	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	71N	78N
2602	2	1	F	30W	0427	152826	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	71N	78N
2603	3	1	F	59W	0427	172253	60S	48S	35S	21S	8S	5N	18N	32N	45N	58N	70N	78N
2604	4	1	F	88W	0427	191724	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2605	5	1	F	116W	0427	211157	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2606	6	1	F	145W	0427	230634	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2607	7	1	W	174W	0428	010106	61S	49S	36S	22S	9S	3N	17N	31N	44N	57N	69N	78N
2608	8	1	W	158E	0428	025547	61S	49S	36S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2609	9	1	W	129E	0428	045031	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2610	10	1	W	100E	0428	064518	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2611	11	1	F	72E	0428	084007	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	71N	78N
2612	12	1	F	43E	0428	103500	60S	47S	34S	20S	7S	6N	19N	33N	46N	59N	71N	78N
2613	13	1	F	14E	0428	122938	60S	47S	34S	21S	7S	5N	19N	32N	46N	59N	71N	78N
2614	1	1	F	14W	0428	142402	60S	48S	35S	21S	8S	5N	18N	32N	45N	58N	70N	78N
2615	2	1	F	43W	0428	161830	61S	48S	35S	22S	8S	4N	18N	31N	44N	58N	70N	78N
2616	3	1	F	72W	0428	181300	61S	49S	35S	22S	9S	4N	17N	31N	44N	57N	69N	78N
2617	4	1	F	100W	0428	200733	61S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2618	5	1	F	129W	0428	220210	62S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2619	6	1	F	158W	0428	235646	62S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2620	7	1	W	174E	0429	015128	62S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2621	8	1	W	145E	0429	034612	61S	49S	36S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2622	9	1	W	116E	0429	054059	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2623	10	1	W	88E	0429	073550	60S	48S	35S	21S	8S	5N	18N	32N	45N	58N	71N	78N
2624	11	1	F	59E	0429	093043	60S	47S	34S	20S	7S	6N	19N	33N	46N	59N	71N	78N
2625	12	1	F	30E	0429	112540	59S	46S	33S	19S	6S	7N	20N	34N	47N	60N	72N	78N
2626	13	1	F	2E	0429	132020	59S	46S	33S	20S	6S	6N	20N	33N	47N	60N	72N	78N
2627	1	1	F	27W	0429	151444	59S	47S	34S	20S	7S	6N	19N	32N	46N	59N	71N	78N
2628	2	1	F	56W	0429	170911	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	70N	78N
2629	3	1	F	84W	0429	190342	60S	48S	35S	21S	8S	5N	18N	32N	45N	58N	70N	78N
2630	4	1	F	113W	0429	205815	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2631	5	1	F	142W	0429	225252	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2632	6	1	W	170W	0430	004726	61S	48S	35S	22S	9S	4N	18N	31N	44N	57N	70N	78N
2633	7	1	W	161E	0430	024207	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2634	8	1	W	132E	0430	043650	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2635	9	1	W	104E	0430	063137	60S	48S	34S	21S	8S	5N	18N	32N	45N	58N	71N	78N
2636	10	1	W	75E	0430	082627	60S	47S	34S	21S	7S	5N	19N	32N	46N	59N	71N	78N
2637	11	1	F	46E	0430	102120	59S	46S	33S	20S	6S	6N	20N	33N	47N	60N	72N	78N
2638	12	1	F	18E	0430	121558	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	71N	78N
2639	1	1	F	11W	0430	141022	60S	47S	34S	21S	7S	5N	19N	32N	45N	58N	71N	78N
2640	2	1	F	40W	0430	160449	60S	48S	35S	21S	8S	5N	18N	32N	45N	58N	70N	78N
2641	3	1	F	68W	0430	175920	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2642	4	1	F	97W	0430	195354	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2643	5	1	F	126W	0430	214830	61S	49S	35S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2644	6	1	F	154W	0430	234300	62S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2645	7	1	W	177E	0501	013740	62S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2646	8	1	W	148E	0501	033223	61S	49S	36S	22S	9S	4N	17N	31N	44N	57N	70N	78N

PASS	TRACK	C	S	ALON	MODA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
2647	9	1	W	120E	0501	052709	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2648	10	1	W	91E	0501	072159	60S	48S	35S	21S	8S	5N	18N	32N	45N	58N	71N	78N
2649	11	1	F	62E	0501	091651	60S	47S	34S	21S	7S	5N	19N	33N	46N	59N	71N	78N
2650	12	1	F	34E	0501	111147	59S	46S	33S	20S	6S	6N	20N	33N	47N	60N	72N	78N
2651	13	1	F	5E	0501	130626	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	71N	78N
2652	1	1	F	24W	0501	150050	60S	47S	34S	21S	7S	5N	19N	32N	46N	59N	71N	78N
2653	2	1	F	52W	0501	165518	60S	48S	34S	21S	8S	5N	18N	32N	45N	58N	70N	78N
2654	3	1	F	81W	0501	184948	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2655	4	1	F	110W	0501	204422	61S	48S	35S	22S	8S	4N	18N	31N	44N	58N	70N	78N
2656	5	1	F	138W	0501	223858	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2657	6	1	F	167W	0502	003334	61S	49S	35S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2658	7	1	W	164E	0502	022815	61S	48S	35S	22S	9S	4N	17N	31N	44N	58N	70N	78N
2659	8	1	W	136E	0502	042259	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2660	9	1	W	107E	0502	061746	60S	48S	35S	21S	8S	5N	18N	32N	45N	58N	70N	78N
2661	10	1	W	78E	0502	081236	60S	47S	34S	21S	7S	5N	19N	32N	46N	59N	71N	78N
2662	11	1	F	50E	0502	100729	59S	46S	33S	20S	6S	6N	20N	33N	47N	60N	72N	78N
2663	12	1	F	21E	0502	120206	59S	47S	34S	20S	7S	6N	19N	33N	46N	59N	71N	78N
2664	1	1	F	8W	0502	135631	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	71N	78N
2665	2	1	F	36W	0502	155058	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2666	3	1	F	65W	0502	174529	61S	48S	35S	22S	8S	4N	18N	31N	44N	58N	70N	78N
2667	4	1	F	94W	0502	194002	61S	49S	35S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2668	5	1	F	122W	0502	213439	61S	49S	36S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2669	6	1	F	151W	0502	232912	62S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2670	7	1	W	180W	0503	012353	61S	49S	36S	22S	9S	4N	17N	31N	44N	57N	69N	78N
2671	8	1	W	152E	0503	031836	61S	49S	36S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2672	9	1	W	123E	0503	051323	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2673	10	1	W	94E	0503	070813	60S	48S	35S	21S	8S	5N	18N	32N	45N	58N	71N	78N
2674	11	1	F	66E	0503	090306	60S	47S	34S	20S	7S	6N	19N	33N	46N	59N	71N	78N
2675	12	1	F	37E	0503	105802	59S	46S	33S	20S	6S	7N	20N	34N	47N	60N	72N	78N
2676	13	1	F	8E	0503	125241	59S	46S	33S	20S	6S	6N	20N	33N	47N	60N	71N	78N
2677	1	1	F	20W	0503	144705	60S	47S	34S	20S	7S	5N	19N	32N	46N	59N	71N	78N
2678	2	1	F	49W	0503	164133	60S	47S	34S	21S	8S	5N	18N	32N	45N	58N	71N	78N
2679	3	1	F	78W	0503	183603	61S	48S	35S	21S	8S	5N	18N	32N	45N	58N	70N	78N
2680	4	1	F	106W	0503	203037	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2681	5	1	F	135W	0503	222513	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2682	6	1	F	164W	0504	001948	61S	48S	35S	22S	9S	4N	18N	31N	44N	58N	70N	78N
2683	7	1	W	168E	0504	021429	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2684	8	1	W	139E	0504	040913	61S	48S	35S	22S	8S	4N	18N	32N	45N	58N	70N	78N
2685	9	1	W	110E	0504	060400	60S	48S	34S	21S	8S	5N	18N	32N	45N	58N	71N	78N
2686	10	1	W	82E	0504	075851	60S	47S	34S	20S	7S	6N	19N	33N	46N	59N	71N	78N
2687	11	1	F	53E	0504	095345	59S	46S	33S	20S	6S	6N	20N	33N	47N	60N	72N	78N
2688	12	1	F	24E	0504	114822	59S	46S	33S	20S	7S	6N	19N	33N	46N	59N	71N	78N
2689	1	1	F	4W	0504	134247	60S	47S	34S	21S	7S	5N	19N	32N	46N	59N	71N	78N
2690	2	1	F	33W	0504	153714	60S	48S	35S	21S	8S	5N	18N	32N	45N	58N	70N	78N
2691	3	1	F	62W	0504	173145	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2692	4	1	F	90W	0504	192619	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2693	5	1	F	119W	0504	212056	61S	48S	35S	22S	9S	4N	18N	31N	44N	58N	70N	78N
2694	6	1	F	148W	0504	231536	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2695	7	1	W	176W	0505	011013	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2696	8	1	W	155E	0505	030458	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2697	9	1	W	126E	0505	045946	60S	48S	34S	21S	8S	5N	18N	32N	45N	58N	71N	78N
2698	10	1	W	98E	0505	065438	60S	47S	34S	20S	7S	6N	19N	33N	46N	59N	71N	78N
2699	11	1	F	69E	0505	084933	59S	46S	33S	20S	6S	6N	20N	34N	47N	60N	72N	78N
2700	12	1	F	40E	0505	104430	58S	45S	32S	19S	5S	7N	21N	35N	48N	61N	73N	78N
2701	13	1	F	12E	0505	123909	58S	45S	32S	19S	5S	7N	21N	34N	47N	60N	72N	78N
2702	1	1	F	17W	0505	143333	59S	46S	33S	20S	6S	6N	20N	33N	47N	60N	72N	78N
2703	2	1	F	46W	0505	162759	59S	47S	34S	20S	7S	6N	19N	33N	46N	59N	71N	78N
2704	3	1	F	74W	0505	182229	60S	47S	34S	21S	7S	5N	19N	32N	46N	59N	71N	78N
2705	4	1	F	103W	0505	201702	60S	47S	34S	21S	7S	5N	19N	32N	45N	59N	71N	78N
2706	5	1	F	132W	0505	221138	60S	47S	34S	20S	7S	6N	20N	33N	47N	60N	72N	78N
2707	6	1	F	160W	0506	000612	60S	48S	35S	21S	8S	5N	18N	32N	45N	58N	70N	78N
2708	7	1	W	171E	0506	020053	60S	48S	35S	21S	8S	5N	18N	32N	45N	58N	71N	78N
2709	8	1	W	142E	0506	035537	60S	47S	34S	21S	7S	5N	19N	32N	46N	59N	71N	78N
2710	9	1	W	114E	0506	055025	60S	47S	34S	20S	7S	6N	19N	33N	46N	59N	71N	78N
2711	10	1	W	85E	0506	074516	59S	46S	33S	20S	6S	6N	20N	33N	47N	60N	72N	78N
2712	11	1	F	56E	0506	094010	58S	46S	32S	19S	5S	7N	21N	34N	48N	61N	72N	78N
2713	12	1	F	28E	0506	113507	58S	45S	31S	18S	4S	8N	22N	35N	49N	62N	73N	78N
2714	1	1	F	1W	0506	132947	57S	45S	32S	18S	5S	8N	21N	35N	48N	61N	73N	78N
2715	2	1	F	30W	0506	152410	58S	45S	32S	19S	6S	7N	21N	34N	47N	60N	72N	78N
2716	3	1	F	58W	0506	171837	59S	46S	33S	20S	6S	6N	20N	33N	47N	60N	72N	78N
2717	4	1	F	87W	0506	191506	60S	43S	36S	21S	7S	6N	20N	33N	47N	60N	72N	78N
2718	5	1	F	116W	0506	210739	60S	47S	34S	20S	7S	6N	19N	33N	46N	59N	71N	78N
2719	6	1	F	144W	0506	230215	60S	47S	34S	20S	7S	6N	19N	33N	46N	59N	71N	78N
2720	7	1	W	173W	0507	005642	60S	48S	34S	21S	8S	5N	19N	32N	45N	58N	71N	78N
2721	8	1	W	158E	0507	025122	60S	47S	34S	21S	8S	5N	19N	32N	46N	59N	71N	78N

PASS	TRACK	C	S	ALON	MODA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
2722	9	1	W	130E	0507	044605	60S	47S	34S	21S	7S	5N	19N	32N	46N	59N	71N	78N
2723	10	1	W	101E	0507	064052	60S	47S	34S	20S	7S	6N	19N	33N	46N	59N	71N	78N
2724	11	1	F	72E	0507	083541	59S	46S	33S	20S	6S	6N	20N	33N	47N	60N	72N	78N
2725	12	1	F	44E	0507	103034	58S	46S	32S	19S	5S	7N	21N	34N	48N	61N	72N	78N
2726	13	1	F	15E	0507	122508	59S	46S	33S	19S	6S	6N	20N	33N	47N	60N	72N	78N
2727	1	1	F	14W	0507	141927	60S	47S	34S	20S	7S	5N	19N	32N	46N	59N	71N	78N
2728	2	1	F	42W	0507	161349	60S	48S	35S	21S	8S	5N	18N	32N	45N	58N	70N	78N
2729	3	1	F	71W	0507	180815	61S	48S	35S	22S	9S	4N	18N	31N	44N	57N	70N	78N
2730	4	1	F	100W	0507	200244	62S	49S	36S	22S	9S	4N	17N	31N	44N	57N	69N	78N
2731	5	1	F	128W	0507	215716	62S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2732	6	1	F	157W	0507	235147	62S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2733	7	1	W	174E	0508	014625	62S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2734	8	1	W	146E	0508	034105	62S	50S	36S	23S	10S	3N	16N	30N	43N	57N	69N	78N
2735	9	1	W	117E	0508	053549	62S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2736	10	1	W	88E	0508	073036	62S	49S	36S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2737	11	1	F	60E	0508	092527	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2738	12	1	F	31E	0508	112020	60S	48S	34S	21S	7S	5N	19N	32N	46N	59N	71N	78N
2739	13	1	F	2E	0508	131456	60S	48S	35S	21S	8S	5N	18N	32N	45N	58N	70N	78N
2740	1	1	F	26W	0508	150920	61S	48S	35S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2741	2	1	F	55W	0508	170346	62S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2742	3	1	F	84W	0508	185816	62S	50S	36S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2743	4	1	F	112W	0508	205249	62S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2744	5	1	F	141W	0508	224725	63S	50S	37S	24S	10S	2N	16N	30N	43N	56N	69N	78N
2745	6	1	W	170W	0509	004156	63S	50S	37S	24S	11S	2N	16N	29N	43N	56N	68N	78N
2746	7	1	W	162E	0509	023638	63S	50S	37S	24S	10S	2N	16N	29N	43N	56N	68N	78N
2747	8	1	W	133E	0509	043122	63S	50S	37S	24S	10S	3N	16N	30N	43N	56N	69N	78N
2748	9	1	W	104E	0509	062609	62S	50S	36S	23S	10S	3N	17N	30N	44N	57N	69N	78N
2749	10	1	W	76E	0509	082100	62S	49S	36S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2750	11	1	F	47E	0509	101553	61S	48S	35S	22S	8S	4N	18N	32N	45N	58N	70N	78N
2751	12	1	F	18E	0509	121033	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2752	1	1	F	10W	0509	140456	62S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2753	2	1	F	39W	0509	155923	62S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2754	3	1	F	68W	0509	175352	63S	50S	37S	24S	10S	2N	16N	29N	43N	56N	68N	78N
2755	4	1	F	96W	0509	194825	63S	50S	37S	24S	11S	2N	16N	29N	43N	56N	68N	78N
2756	5	1	F	125W	0509	214301	63S	50S	37S	24S	11S	2N	15N	29N	42N	56N	68N	78N
2757	6	1	F	154W	0509	233740	63S	50S	37S	24S	11S	2N	16N	29N	43N	56N	68N	78N
2758	7	1	W	178E	0510	013217	63S	51S	37S	24S	11S	2N	15N	29N	42N	56N	68N	78N
2759	8	1	W	149E	0510	032702	63S	50S	37S	24S	10S	2N	16N	29N	43N	56N	68N	78N
2760	9	1	W	120E	0510	052150	62S	50S	37S	23S	10S	3N	16N	30N	43N	57N	69N	78N
2761	10	1	W	92E	0510	071641	62S	49S	36S	23S	9S	3N	17N	31N	44N	57N	70N	78N
2762	11	1	F	63E	0510	091136	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2763	12	1	F	34E	0510	110633	60S	47S	34S	21S	7S	5N	19N	32N	46N	59N	71N	78N
2764	13	1	F	6E	0510	130114	60S	47S	34S	21S	8S	5N	19N	32N	45N	58N	71N	78N
2765	1	1	F	23W	0510	145537	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2766	2	1	F	52W	0510	165003	62S	49S	36S	22S	9S	4N	17N	31N	44N	57N	69N	78N
2767	3	1	F	80W	0510	184432	62S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2768	4	1	F	109W	0510	203904	62S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2769	5	1	F	138W	0510	223339	62S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2770	6	1	W	166W	0511	002813	63S	50S	37S	24S	10S	2N	16N	29N	43N	56N	69N	78N
2771	7	1	W	165E	0511	022254	63S	50S	37S	24S	10S	3N	16N	30N	43N	56N	69N	78N
2772	8	1	W	136E	0511	041738	62S	50S	37S	23S	10S	3N	16N	30N	43N	57N	69N	78N
2773	9	1	W	108E	0511	061225	62S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2774	10	1	W	79E	0511	080716	61S	49S	36S	22S	9S	4N	18N	31N	45N	58N	70N	78N
2775	11	1	F	50E	0511	100210	61S	48S	35S	21S	8S	5N	18N	32N	45N	58N	71N	78N
2776	12	1	F	22E	0511	115647	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2777	1	1	F	7W	0511	135109	62S	49S	36S	22S	9S	3N	17N	31N	44N	57N	69N	78N
2778	2	1	F	36W	0511	154535	62S	50S	36S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2779	3	1	F	64W	0511	174005	63S	50S	37S	24S	10S	2N	16N	30N	43N	56N	68N	78N
2780	4	1	F	93W	0511	193437	63S	50S	37S	24S	10S	2N	16N	29N	43N	56N	68N	78N
2781	5	1	F	122W	0511	212912	63S	51S	37S	24S	11S	2N	16N	29N	42N	56N	68N	78N
2782	6	1	F	150W	0511	232351	63S	50S	37S	24S	11S	2N	16N	29N	43N	56N	68N	78N
2783	7	1	W	179W	0512	011829	63S	51S	37S	24S	11S	2N	16N	29N	43N	56N	68N	78N
2784	8	1	W	152E	0512	031314	63S	50S	37S	24S	10S	2N	16N	29N	43N	56N	69N	78N
2785	9	1	W	124E	0512	050802	62S	50S	37S	23S	10S	3N	16N	30N	43N	57N	69N	78N
2786	10	1	W	95E	0512	070253	62S	49S	36S	23S	9S	4N	17N	31N	44N	57N	70N	78N
2787	11	1	F	66E	0512	085747	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2788	12	1	F	38E	0512	105244	60S	47S	34S	21S	7S	5N	19N	32N	46N	59N	71N	78N
2789	13	1	F	9E	0512	124722	60S	48S	34S	21S	8S	5N	18N	32N	45N	58N	70N	78N
2790	1	1	F	20W	0512	144145	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2791	2	1	F	48W	0512	163611	62S	49S	36S	23S	9S	3N	17N	31N	44N	57N	69N	78N
2792	3	1	F	77W	0512	183040	62S	49S	36S	23S	10S	3N	17N	30N	43N	57N	69N	78N
2793	4	1	F	106W	0512	202512	62S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2794	5	1	F	134W	0512	221948	63S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2795	6	1	F	163W	0513	001428	63S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2796	7	1	W	168E	0513	020910	62S	50S	37S	23S	10S	3N	16N	30N	43N	57N	69N	78N

PASS	TRACK	C	S	ALON	MODA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
2797	8	1	W	140E	0513	040355	62S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2798	9	1	W	111E	0513	055843	62S	49S	36S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2799	10	1	W	82E	0513	075334	61S	48S	35S	22S	8S	4N	18N	32N	45N	58N	70N	78N
2800	11	1	F	54E	0513	094829	60S	48S	34S	21S	7S	5N	19N	32N	46N	59N	71N	78N
2801	12	1	F	25E	0513	114305	60S	48S	35S	21S	8S	5N	18N	32N	45N	58N	70N	78N
2802	1	1	F	4W	0513	133725	61S	49S	36S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2803	2	1	F	32W	0513	153147	62S	50S	36S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2804	3	1	F	61W	0513	172613	63S	50S	37S	24S	10S	2N	16N	29N	43N	56N	68N	78N
2805	4	1	F	90W	0513	192043	63S	51S	37S	24S	11S	2N	15N	29N	42N	56N	68N	77N
2806	5	1	F	118W	0513	211515	64S	51S	38S	24S	11S	2N	15N	29N	42N	55N	68N	77N
2807	6	1	F	147W	0513	230950	64S	51S	38S	25S	11S	1N	15N	28N	42N	55N	68N	77N
2808	7	1	W	176W	0514	010422	64S	51S	38S	25S	12S	1N	15N	28N	42N	55N	67N	77N
2809	8	1	W	156E	0514	025903	64S	51S	38S	25S	11S	1N	15N	28N	42N	55N	67N	77N
2810	9	1	W	127E	0514	045347	64S	51S	38S	25S	11S	1N	15N	29N	42N	55N	68N	77N
2811	10	1	W	98E	0514	064834	63S	51S	38S	24S	11S	2N	16N	29N	43N	56N	68N	78N
2812	11	1	W	70E	0514	084335	62S	50S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2813	12	1	F	41E	0514	103830	61S	49S	36S	22S	9S	4N	18N	31N	45N	58N	70N	78N
2814	13	1	F	12E	0514	123307	62S	49S	36S	22S	9S	4N	17N	31N	44N	57N	69N	78N
2815	1	1	F	16W	0514	142730	62S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2816	2	1	F	45W	0514	162156	63S	50S	37S	24S	10S	2N	16N	29N	43N	56N	68N	78N
2817	3	1	F	74W	0514	181625	63S	51S	38S	24S	11S	2N	15N	29N	42N	55N	68N	77N
2818	4	1	F	102W	0514	201057	64S	51S	38S	25S	11S	1N	15N	28N	42N	55N	68N	77N
2819	5	1	F	131W	0514	220533	64S	51S	38S	25S	11S	1N	15N	28N	42N	55N	67N	77N
2820	6	1	F	160W	0515	000012	64S	51S	38S	25S	11S	1N	15N	28N	42N	55N	68N	77N
2821	7	1	W	172E	0515	015453	64S	51S	38S	25S	11S	1N	15N	29N	42N	55N	68N	77N
2822	8	1	W	143E	0515	034938	63S	51S	38S	24S	11S	2N	15N	29N	42N	56N	68N	77N
2823	9	1	W	114E	0515	054426	63S	50S	37S	24S	10S	2N	16N	29N	43N	56N	68N	78N
2824	10	1	W	86E	0515	073917	62S	50S	37S	23S	10S	3N	17N	30N	44N	57N	69N	78N
2825	11	1	F	57E	0515	093411	62S	49S	36S	22S	9S	4N	17N	31N	44N	58N	70N	78N
2826	12	1	F	28E	0515	112908	61S	48S	35S	21S	8S	5N	18N	32N	45N	58N	71N	78N
2827	1	1	F	0W	0515	132346	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2828	2	1	F	29W	0515	151809	62S	49S	36S	23S	9S	4N	17N	31N	44N	57N	69N	78N
2829	3	1	F	58W	0515	171235	62S	50S	36S	23S	10S	3N	16N	30N	43N	57N	69N	78N
2830	4	1	F	86W	0515	190704	63S	50S	37S	24S	10S	2N	16N	29N	43N	56N	68N	78N
2831	5	1	F	115W	0515	210136	63S	50S	37S	24S	10S	2N	16N	29N	43N	56N	68N	78N
2832	6	1	F	144W	0515	225612	63S	51S	37S	24S	11S	2N	16N	29N	43N	56N	68N	78N
2833	7	1	W	172W	0516	005049	63S	51S	38S	24S	11S	2N	15N	29N	42N	56N	68N	78N
2834	8	1	W	159E	0516	024531	63S	51S	37S	24S	10S	2N	16N	29N	43N	56N	68N	78N
2835	9	1	W	130E	0516	044015	63S	50S	37S	24S	10S	2N	16N	30N	43N	56N	69N	78N
2836	10	1	W	102E	0516	063503	62S	50S	37S	23S	10S	3N	17N	30N	44N	57N	69N	78N
2837	11	1	W	73E	0516	082954	62S	49S	36S	23S	9S	4N	17N	31N	44N	57N	70N	78N
2838	12	1	F	44E	0516	102448	61S	48S	35S	22S	8S	4N	18N	32N	45N	58N	70N	78N
2839	13	1	F	16E	0516	122117	55S	43S	29S	17S	3S	10N	23N	37N	50N	63N	74N	78N
2840	1	1	F	13W	0516	141350	62S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2841	2	1	F	42W	0516	160816	63S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2842	3	1	F	70W	0516	180245	63S	50S	37S	24S	10S	2N	16N	29N	43N	56N	68N	78N
2843	4	1	F	99W	0516	195715	63S	51S	38S	24S	11S	2N	15N	29N	42N	55N	68N	77N
2844	5	1	F	128W	0516	215150	64S	51S	38S	25S	11S	2N	15N	29N	42N	55N	68N	77N
2845	6	1	F	156W	0516	234620	64S	51S	38S	25S	11S	2N	15N	29N	42N	55N	68N	77N
2846	7	1	W	175E	0517	014110	63S	51S	38S	24S	11S	2N	15N	29N	42N	56N	68N	77N
2847	8	1	W	146E	0517	033555	63S	51S	37S	24S	11S	2N	16N	29N	43N	56N	68N	78N
2848	9	1	W	118E	0517	053042	63S	50S	37S	24S	10S	3N	16N	30N	43N	56N	69N	78N
2849	10	1	W	89E	0517	072533	62S	50S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2850	11	1	F	60E	0517	092027	62S	49S	36S	22S	9S	4N	18N	31N	45N	58N	70N	78N
2851	12	1	F	32E	0517	111525	61S	48S	35S	21S	8S	5N	19N	32N	46N	59N	71N	78N
2852	13	1	F	3E	0517	131006	61S	48S	35S	21S	8S	5N	18N	32N	45N	58N	70N	78N
2853	1	1	F	26W	0517	150429	61S	49S	35S	22S	9S	4N	18N	31N	44N	58N	70N	78N
2854	2	1	F	54W	0517	165854	62S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2855	3	1	F	83W	0517	185323	62S	50S	37S	23S	10S	3N	16N	30N	43N	57N	69N	78N
2856	4	1	F	112W	0517	204756	63S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2857	5	1	F	140W	0517	224231	63S	50S	37S	24S	10S	2N	16N	30N	43N	56N	69N	78N
2858	6	1	W	169W	0518	003710	63S	50S	37S	24S	10S	2N	16N	30N	43N	56N	69N	78N
2859	7	1	W	162E	0518	023152	63S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2860	8	1	W	134E	0518	042637	62S	50S	37S	23S	10S	3N	17N	30N	44N	57N	69N	78N
2861	9	1	W	105E	0518	062125	62S	49S	36S	23S	9S	4N	17N	31N	44N	57N	70N	78N
2862	10	1	W	77E	0518	081617	61S	49S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2863	11	1	F	48E	0518	101111	61S	48S	35S	21S	8S	5N	19N	32N	46N	59N	71N	78N
2864	12	1	F	19E	0518	120551	61S	48S	35S	21S	8S	5N	18N	32N	45N	58N	70N	78N
2865	1	1	F	9W	0518	140013	61S	49S	35S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2866	2	1	F	38W	0518	155439	62S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2867	3	1	F	67W	0518	174908	62S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2868	4	1	F	95W	0518	194340	63S	50S	37S	24S	10S	2N	16N	30N	43N	56N	69N	78N
2869	5	1	F	124W	0518	213816	63S	50S	37S	24S	10S	2N	16N	30N	43N	56N	68N	78N
2870	6	1	F	153W	0518	233250	63S	50S	37S	24S	10S	2N	16N	29N	43N	56N	68N	78N
2871	7	1	W	179E	0519	012731	63S	50S	37S	24S	10S	2N	16N	29N	43N	56N	68N	78N

PASS	TRACK	C	S	ALON	MODA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
2872	8	1	W	150E	0519	032216	63S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2873	9	1	W	121E	0519	051703	62S	50S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2874	10	1	W	93E	0519	071154	62S	49S	36S	22S	9S	4N	17N	31N	44N	58N	70N	78N
2875	11	1	F	64E	0519	090648	61S	48S	35S	22S	8S	5N	18N	32N	45N	58N	70N	78N
2876	12	1	F	35E	0519	110145	60S	47S	34S	21S	7S	6N	19N	33N	46N	59N	71N	78N
2877	13	1	F	7E	0519	125627	60S	47S	34S	21S	7S	5N	19N	32N	46N	59N	71N	78N
2878	1	1	F	22W	0519	145049	61S	48S	35S	22S	8S	5N	18N	32N	45N	58N	70N	78N
2879	2	1	F	51W	0519	164515	61S	49S	36S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2880	3	1	F	79W	0519	183944	62S	49S	36S	23S	9S	3N	17N	31N	44N	57N	69N	78N
2881	4	1	F	108W	0519	203416	62S	50S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2882	5	1	F	137W	0519	222851	62S	50S	37S	23S	10S	3N	17N	30N	43N	57N	69N	78N
2883	6	1	F	165W	0520	002327	63S	50S	37S	23S	10S	3N	16N	30N	43N	57N	69N	78N
2884	7	1	W	166E	0520	021809	62S	50S	37S	23S	10S	3N	17N	30N	44N	57N	69N	78N
2885	8	1	W	137E	0520	041253	62S	49S	36S	23S	9S	3N	17N	31N	44N	57N	69N	78N
2886	9	1	W	109E	0520	060741	62S	49S	36S	22S	9S	4N	17N	31N	44N	58N	70N	78N
2887	10	1	W	80E	0520	080231	61S	48S	35S	22S	8S	4N	18N	32N	45N	58N	70N	78N
2888	11	1	F	51E	0520	095725	60S	48S	34S	21S	7S	5N	19N	32N	46N	59N	71N	78N
2889	12	1	F	23E	0520	115223	60S	47S	33S	20S	6S	6N	20N	34N	47N	60N	72N	78N
2890	1	1	F	6W	0520	134703	60S	47S	33S	20S	7S	6N	20N	33N	46N	59N	71N	78N
2891	2	1	F	35W	0520	154125	60S	48S	34S	21S	7S	5N	19N	32N	46N	59N	71N	78N
2892	3	1	F	63W	0520	173551	61S	48S	35S	22S	8S	4N	18N	32N	45N	58N	70N	78N
2893	4	1	F	92W	0520	193020	61S	49S	35S	22S	9S	4N	18N	31N	45N	58N	70N	78N
2894	5	1	F	121W	0520	212453	62S	49S	36S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2895	6	1	F	149W	0520	231928	62S	49S	36S	23S	9S	4N	17N	31N	44N	57N	69N	78N
2896	7	1	W	178W	0521	011404	62S	49S	36S	23S	9S	3N	17N	31N	44N	57N	69N	78N
2897	8	1	W	153E	0521	030846	62S	49S	36S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2898	9	1	W	125E	0521	050331	62S	49S	36S	22S	9S	4N	18N	31N	45N	58N	70N	78N
2899	10	1	W	96E	0521	065819	61S	48S	35S	22S	8S	5N	18N	32N	45N	58N	70N	78N
2900	11	1	F	67E	0521	085310	61S	48S	34S	21S	7S	5N	19N	32N	46N	59N	71N	78N
2901	12	1	F	39E	0521	104804	60S	47S	34S	20S	7S	6N	20N	33N	47N	60N	72N	78N
2902	13	1	F	10E	0521	124242	60S	47S	34S	20S	7S	6N	19N	33N	46N	59N	71N	78N
2903	1	1	F	19W	0521	143707	61S	48S	35S	21S	8S	5N	19N	32N	45N	58N	71N	78N
2904	2	1	F	47W	0521	163134	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2905	3	1	F	76W	0521	182605	61S	49S	36S	22S	9S	4N	18N	31N	45N	58N	70N	78N
2906	4	1	F	105W	0521	202039	62S	49S	36S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2907	5	1	F	133W	0521	221516	62S	49S	36S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2908	6	1	F	162W	0522	000945	62S	50S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2909	7	1	W	169E	0522	020426	62S	49S	36S	23S	9S	3N	17N	31N	44N	57N	69N	78N
2910	8	1	W	141E	0522	035911	62S	49S	36S	22S	9S	4N	17N	31N	44N	57N	70N	78N
2911	9	1	W	112E	0522	055359	61S	49S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2912	10	1	W	83E	0522	074850	61S	48S	35S	21S	8S	5N	19N	32N	46N	59N	71N	78N
2913	11	1	F	55E	0522	094344	60S	47S	34S	20S	7S	6N	19N	33N	46N	59N	71N	78N
2914	12	1	F	26E	0522	113820	60S	47S	34S	21S	7S	5N	19N	32N	46N	59N	71N	78N
2915	1	1	F	3W	0522	133241	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
2916	2	1	F	31W	0522	152706	62S	49S	36S	22S	9S	4N	17N	31N	44N	57N	69N	78N
2917	3	1	F	60W	0522	172133	62S	50S	36S	23S	10S	3N	17N	30N	44N	57N	69N	78N
2918	4	1	F	89W	0522	191604	63S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2919	5	1	F	117W	0522	211028	63S	51S	38S	24S	11S	2N	15N	29N	42N	56N	68N	77N
2920	6	1	F	146W	0522	230503	64S	51S	38S	24S	11S	2N	15N	29N	42N	55N	68N	77N
2921	7	1	W	175W	0523	005941	64S	51S	38S	24S	11S	2N	15N	29N	42N	55N	68N	77N
2922	8	1	W	157E	0523	025422	63S	51S	38S	24S	11S	2N	15N	29N	42N	56N	68N	77N
2923	9	1	W	128E	0523	044906	63S	51S	37S	24S	10S	2N	16N	29N	43N	56N	68N	78N
2924	10	1	W	99E	0523	064354	63S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2925	11	1	F	71E	0523	083844	62S	50S	36S	23S	9S	3N	17N	31N	44N	57N	69N	78N
2926	12	1	F	42E	0523	103338	62S	49S	36S	22S	9S	4N	18N	31N	45N	58N	70N	78N
2927	13	1	F	13E	0523	122816	62S	49S	36S	22S	9S	4N	17N	31N	44N	57N	69N	78N
2928	1	1	F	15W	0523	142239	62S	50S	37S	23S	10S	3N	17N	30N	43N	57N	69N	78N
2929	2	1	F	44W	0523	161705	63S	50S	37S	24S	10S	2N	16N	29N	43N	56N	68N	78N
2930	3	1	F	73W	0523	181134	63S	51S	38S	24S	11S	2N	15N	29N	42N	56N	68N	77N
2931	4	1	F	101W	0523	200606	64S	51S	38S	25S	11S	2N	15N	29N	42N	55N	68N	77N
2932	5	1	F	130W	0523	220041	64S	51S	38S	25S	11S	1N	15N	29N	42N	55N	68N	77N
2933	6	1	F	159W	0523	235520	64S	51S	38S	25S	11S	1N	15N	29N	42N	55N	68N	77N
2934	7	1	W	173E	0524	015001	64S	51S	38S	25S	11S	2N	15N	29N	42N	55N	68N	77N
2935	8	1	W	144E	0524	034446	64S	51S	38S	24S	11S	2N	16N	29N	43N	56N	68N	77N
2936	9	1	W	115E	0524	053933	63S	50S	37S	24S	10S	2N	16N	30N	43N	56N	69N	78N
2937	10	1	W	87E	0524	073424	63S	50S	37S	23S	10S	3N	17N	30N	44N	57N	69N	78N
2938	11	1	F	58E	0524	092918	62S	49S	36S	22S	9S	4N	17N	31N	44N	58N	70N	78N
2939	12	1	F	29E	0524	112355	62S	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2940	13	1	F	1E	0524	131818	63S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2941	1	1	F	28W	0524	151244	63S	51S	37S	24S	11S	2N	16N	29N	42N	56N	68N	77N
2942	2	1	F	57W	0524	170713	64S	51S	38S	25S	11S	1N	15N	29N	42N	55N	68N	77N
2943	3	1	F	85W	0524	190146	64S	51S	38S	25S	11S	1N	15N	28N	42N	55N	67N	77N
2944	4	1	F	114W	0524	205621	64S	52S	38S	25S	12S	1N	15N	28N	42N	55N	67N	77N
2945	5	1	F	143W	0524	225100	64S	52S	38S	25S	12S	1N	15N	28N	42N	55N	67N	77N
2946	6	1	W	171W	0525	004540	64S	52S	38S	25S	11S	1N	15N	28N	42N	55N	67N	77N

PASS	TRACK	C	S	ALON	MODA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
2947	7	1	W	160E	0525	024025	64S	51S	38S	25S	11S	2N	15N	29N	42N	55N	68N	77N
2948	8	1	W	131E	0525	043513	63S	51S	38S	24S	11S	2N	16N	29N	43N	56N	68N	78N
2949	9	1	W	103E	0525	063004	63S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2950	10	1	F	74E	0525	082458	62S	49S	36S	23S	9S	4N	17N	31N	44N	57N	70N	78N
2951	11	1	F	45E	0525	101955	61S	48S	35S	22S	8S	5N	18N	32N	45N	58N	70N	78N
2952	12	1	F	17E	0525	121431	61S	49S	35S	22S	9S	4N	18N	31N	44N	57N	70N	78N
2953	1	1	F	12W	0525	140852	62S	50S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2954	2	1	F	41W	0525	160316	63S	50S	37S	24S	10S	2N	16N	29N	43N	56N	68N	78N
2955	3	1	F	69W	0525	175743	64S	51S	38S	24S	11S	2N	15N	29N	42N	55N	68N	77N
2956	4	1	F	98W	0525	195214	64S	51S	38S	25S	11S	1N	15N	29N	42N	55N	68N	77N
2957	5	1	F	127W	0525	214647	64S	52S	38S	25S	11S	1N	15N	28N	42N	55N	67N	77N
2958	6	1	F	155W	0525	234118	65S	52S	39S	25S	12S	1N	14N	28N	41N	54N	67N	77N
2959	7	1	W	176E	0526	013557	65S	52S	39S	25S	12S	1N	14N	28N	41N	55N	67N	77N
2960	8	1	W	147E	0526	033039	64S	52S	39S	25S	12S	1N	15N	28N	42N	55N	67N	77N
2961	9	1	W	119E	0526	052525	64S	51S	38S	25S	11S	1N	15N	29N	42N	55N	68N	77N
2962	10	1	W	90E	0526	072013	64S	51S	38S	24S	11S	2N	16N	29N	43N	56N	68N	78N
2963	11	1	F	61E	0526	091505	63S	50S	37S	24S	10S	3N	16N	30N	43N	56N	69N	78N
2964	12	1	F	33E	0526	110941	63S	50S	37S	24S	10S	2N	16N	29N	43N	56N	68N	77N
2965	13	1	F	4E	0526	130404	64S	51S	38S	25S	11S	1N	15N	28N	42N	55N	67N	77N
2966	1	1	F	25W	0526	145830	64S	52S	39S	25S	12S	1N	14N	28N	41N	54N	67N	77N
2967	2	1	F	53W	0526	165259	65S	52S	39S	26S	12S	0N	14N	27N	41N	54N	67N	77N
2968	3	1	F	82W	0526	184731	65S	53S	40S	26S	13S	0N	14N	27N	41N	54N	66N	76N
2969	4	1	F	111W	0526	204270	63S	53S	41S	22S	17S	0N	13N	28N	41N	54N	67N	77N
2970	5	1	F	139W	0526	223646	65S	53S	40S	26S	13S	0N	13N	27N	40N	54N	66N	76N
2971	6	1	F	168W	0527	003125	65S	53S	40S	26S	13S	0N	14N	27N	41N	54N	66N	77N
2972	7	1	W	163E	0527	022609	65S	53S	39S	26S	12S	0N	14N	27N	41N	54N	67N	77N
2973	8	1	W	135E	0527	042057	65S	52S	39S	25S	12S	1N	14N	28N	41N	55N	67N	77N
2974	9	1	W	106E	0527	061548	64S	51S	38S	25S	11S	1N	15N	29N	42N	55N	68N	77N
2975	10	1	W	77E	0527	081042	63S	51S	37S	24S	10S	2N	16N	29N	43N	56N	68N	78N
2976	11	1	F	49E	0527	100540	63S	50S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
2977	12	1	F	20E	0527	120019	63S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2978	1	1	F	9W	0527	135441	63S	51S	37S	24S	11S	2N	16N	29N	42N	56N	68N	77N
2979	2	1	F	37W	0527	154907	64S	51S	38S	25S	11S	1N	15N	28N	42N	55N	67N	77N
2980	3	1	F	66W	0527	174336	64S	52S	39S	25S	12S	1N	14N	28N	41N	55N	67N	77N
2981	4	1	F	95W	0527	193809	65S	52S	39S	26S	12S	1N	14N	28N	41N	54N	67N	77N
2982	5	1	F	123W	0527	213244	65S	52S	39S	26S	12S	0N	14N	28N	41N	54N	67N	77N
2983	6	1	F	152W	0527	232723	65S	52S	39S	26S	12S	0N	14N	28N	41N	54N	67N	77N
2984	7	1	W	179E	0528	012205	65S	52S	39S	25S	12S	1N	14N	28N	41N	54N	67N	77N
2985	8	1	W	151E	0528	031649	64S	52S	39S	25S	12S	1N	15N	28N	42N	55N	67N	77N
2986	9	1	W	122E	0528	051137	64S	51S	38S	25S	11S	1N	15N	29N	42N	55N	68N	77N
2987	10	1	W	93E	0528	070628	63S	51S	37S	24S	10S	2N	16N	29N	43N	56N	68N	78N
2988	11	1	F	65E	0528	090121	63S	50S	37S	23S	10S	3N	17N	30N	44N	57N	69N	78N
2989	12	1	F	36E	0528	105618	62S	49S	36S	22S	9S	4N	18N	31N	45N	58N	70N	78N
2990	13	1	F	7E	0528	125057	62S	49S	36S	23S	9S	4N	17N	31N	44N	57N	69N	78N
2991	1	1	F	21W	0528	144520	63S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
2992	2	1	F	50W	0528	163946	63S	51S	37S	24S	10S	2N	16N	29N	43N	56N	68N	77N
2993	3	1	F	79W	0528	183415	64S	51S	38S	24S	11S	2N	15N	29N	42N	55N	68N	77N
2994	4	1	F	107W	0528	202847	64S	51S	38S	25S	11S	1N	15N	28N	42N	55N	67N	77N
2995	5	1	F	136W	0528	222323	64S	52S	38S	25S	11S	1N	15N	28N	42N	55N	67N	77N
2996	6	1	W	165W	0529	001807	64S	51S	38S	25S	11S	1N	15N	29N	42N	55N	68N	77N
2997	7	1	W	167E	0529	021248	64S	51S	38S	25S	11S	2N	15N	29N	42N	55N	68N	77N
2998	8	1	W	138E	0529	040733	64S	51S	38S	24S	11S	2N	16N	29N	43N	56N	68N	78N
2999	9	1	W	109E	0529	060221	63S	50S	37S	24S	10S	2N	16N	30N	43N	56N	68N	78N
3000	10	1	W	81E	0529	075712	63S	50S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
3001	11	1	F	52E	0529	095206	62S	49S	36S	22S	9S	4N	18N	31N	45N	58N	70N	78N
3002	12	1	F	23E	0529	114644	62S	49S	36S	22S	9S	4N	17N	31N	44N	57N	69N	78N
3003	1	1	F	5W	0529	134107	63S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
3004	2	1	F	34W	0529	153533	63S	51S	37S	24S	10S	2N	16N	29N	43N	56N	68N	77N
3005	3	1	F	63W	0529	173002	64S	51S	38S	24S	11S	2N	15N	29N	42N	55N	68N	77N
3006	4	1	F	91W	0529	192434	64S	51S	38S	25S	11S	1N	15N	29N	42N	55N	67N	77N
3007	5	1	F	120W	0529	211910	64S	51S	38S	25S	11S	1N	15N	28N	42N	55N	67N	77N
3008	6	1	F	149W	0529	231348	64S	51S	38S	25S	11S	1N	15N	28N	42N	55N	67N	77N
3009	7	1	W	177W	0530	010829	64S	51S	38S	25S	11S	1N	15N	29N	42N	55N	68N	77N
3010	8	1	W	154E	0530	030314	64S	51S	38S	24S	11S	2N	15N	29N	42N	55N	68N	77N
3011	9	1	W	125E	0530	045801	63S	51S	37S	24S	10S	2N	16N	29N	43N	56N	68N	78N
3012	10	1	W	97E	0530	065252	63S	50S	37S	23S	10S	3N	17N	30N	44N	57N	69N	78N
3013	11	1	F	68E	0530	084746	62S	49S	36S	23S	9S	4N	17N	31N	44N	57N	70N	78N
3014	12	1	F	39E	0530	104243	61S	48S	35S	22S	8S	5N	18N	32N	45N	58N	70N	78N
3015	13	1	F	11E	0530	123721	61S	48S	35S	22S	8S	4N	18N	31N	45N	58N	70N	78N
3016	1	1	F	18W	0530	143144	62S	49S	36S	23S	9S	3N	17N	31N	44N	57N	69N	78N
3017	2	1	F	47W	0530	162610	63S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
3018	3	1	F	75W	0530	182039	63S	50S	37S	24S	10S	2N	16N	29N	43N	56N	68N	78N
3019	4	1	F	104W	0530	201512	63S	51S	37S	24S	11S	2N	16N	29N	43N	56N	68N	77N
3020	5	1	F	133W	0530	220947	64S	51S	38S	24S	11S	2N	16N	29N	42N	56N	68N	77N
3021	6	1	F	161W	0531	000432	63S	51S	37S	24S	10S	2N	16N	29N	43N	56N	68N	78N

PASS	TRACK	C	S	ALON	MODA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
3022	7	1	W	170E	0531	015914	63S	50S	37S	24S	10S	3N	16N	30N	43N	56N	69N	78N
3023	8	1	W	141E	0531	035400	63S	50S	37S	23S	10S	3N	17N	30N	43N	57N	69N	78N
3024	9	1	W	113E	0531	054848	62S	50S	36S	23S	9S	3N	17N	31N	44N	57N	69N	78N
3025	10	1	W	84E	0531	074340	62S	49S	36S	22S	9S	4N	18N	31N	45N	58N	70N	78N
3026	11	1	F	55E	0531	093835	61S	48S	35S	21S	8S	5N	19N	32N	46N	59N	71N	78N
3027	12	1	F	27E	0531	113312	61S	48S	35S	22S	8S	5N	18N	32N	45N	58N	70N	78N
3028	1	1	F	2W	0531	132735	62S	49S	36S	22S	9S	4N	17N	31N	44N	57N	69N	78N
3029	2	1	F	31W	0531	152201	62S	50S	36S	23S	9S	3N	17N	30N	44N	57N	69N	78N
3030	3	1	F	59W	0531	171630	63S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
3031	4	1	F	88W	0531	191102	63S	50S	37S	24S	10S	2N	16N	29N	43N	56N	68N	78N
3032	5	1	F	117W	0531	210538	63S	51S	37S	24S	10S	2N	16N	29N	43N	56N	68N	78N
3033	6	1	F	145W	0531	230017	63S	51S	37S	24S	10S	2N	16N	29N	43N	56N	68N	78N
3034	7	1	W	174W	0601	005458	63S	50S	37S	24S	10S	2N	16N	30N	43N	56N	68N	78N
3035	8	1	W	157E	0601	024943	63S	50S	37S	23S	10S	3N	16N	30N	43N	56N	69N	78N
3036	9	1	W	129E	0601	044432	62S	50S	36S	23S	9S	3N	17N	31N	44N	57N	69N	78N
3037	10	1	W	100E	0601	063923	62S	49S	36S	22S	9S	4N	18N	31N	45N	58N	70N	78N
539	6	1	F	147W	0601	004721	53S	39S	26S	12S	0N	14N	27N	40N	53N	65N		
540	7	1	W	175W	0601	024104	52S	39S	26S	12S	1N	14N	27N	41N	54N	66N	76N	76N
541	8	1	W	156E	0601	043450	52S	38S	25S	11S	1N	15N	28N	41N	54N	67N	76N	76N
542	9	1	W	128E	0601	062838	51S	38S	24S	11S	2N	15N	29N	42N	55N	67N	76N	
543	10	1	W	100E	0601	082229	50S	37S	24S	10S	3N	16N	29N	43N	56N	68N	77N	
544	11	1	F	71E	0601	101622	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	77N	
545	12	1	F	43E	0601	121018	48S	35S	22S	8S	5N	18N	31N	45N	58N	70N	77N	
546	13	1	F	14E	0601	140356	48S	35S	22S	8S	4N	18N	31N	44N	57N	69N	77N	
547	1	1	F	14W	0601	155718	49S	36S	22S	9S	4N	17N	30N	44N	57N	69N	77N	
548	2	1	F	42W	0601	175042	50S	36S	23S	9S	3N	17N	30N	43N	56N	68N		
549	3	1	F	71W	0602	194409	50S	37S	23S	10S	3N	16N	29N	43N	56N	68N		
550	4	1	F	99W	0602	213738	50S	37S	24S	10S	2N	16N	29N	42N	55N	67N		
551	5	1	F	128W	0602	233110	51S	37S	24S	10S	2N	16N	29N	42N	55N			
552	6	1	F	156W	0603	012438	51S	38S	24S	11S	2N	15N	29N	42N	55N			
553	7	1	W	176E	0603	031815	51S	38S	24S	11S	2N	15N	29N	42N	55N	67N	76N	75N
554	8	1	W	147E	0603	051155	51S	37S	24S	10S	2N	16N	29N	42N	55N	67N	77N	75N
555	9	1	W	119E	0603	070537	50S	37S	24S	10S	2N	16N	29N	43N	56N	68N	77N	
556	10	1	W	90E	0603	085921	50S	37S	23S	10S	3N	16N	30N	43N	56N	68N	77N	
557	11	1	F	62E	0603	105308	49S	36S	23S	9S	3N	17N	30N	44N	57N	69N	77N	
558	12	1	F	34E	0603	124658	49S	35S	22S	8S	4N	18N	31N	44N	57N	69N	77N	
559	13	1	F	5E	0603	144031	49S	36S	22S	9S	4N	17N	31N	44N	57N	69N	77N	
560	1	1	F	23W	0603	163353	49S	36S	23S	9S	3N	17N	30N	43N	56N	68N	77N	
561	2	1	F	52W	0603	182717	50S	37S	23S	10S	3N	16N	29N	43N	55N	68N	77N	
562	3	1	F	80W	0603	202044	51S	37S	24S	10S	2N	16N	29N	42N	55N	67N	77N	
563	4	1	F	108W	0603	221413	51S	38S	24S	11S	2N	15N	29N	42N	55N			
564	5	1	F	137W	0604	000742	51S	38S	25S	11S	1N	15N	28N	42N	55N			
565	6	1	F	165W	0604	020116	51S	38S	25S	11S	1N	15N	28N	42N	54N			
566	7	1	W	166E	0604	035453	51S	38S	25S	11S	1N	15N	28N	42N	55N	67N	76N	75N
567	8	1	W	138E	0604	054833	51S	38S	24S	11S	2N	15N	29N	42N	55N	67N	76N	75N
568	9	1	W	110E	0604	074215	51S	37S	24S	11S	2N	16N	29N	42N	55N	67N	77N	
569	10	1	W	81E	0604	093559	50S	37S	24S	10S	2N	16N	29N	43N	56N	68N	77N	
570	11	1	F	53E	0604	112946	50S	36S	23S	9S	3N	17N	30N	43N	56N	68N	77N	
571	12	1	F	25E	0604	132318	50S	37S	23S	10S	3N	16N	29N	43N	56N	68N	77N	
572	1	1	F	4W	0604	151640	51S	37S	24S	11S	2N	15N	29N	42N	55N	67N	76N	
573	2	1	F	32W	0604	171004	51S	38S	25S	11S	1N	15N	28N	41N	54N	67N	76N	
574	3	1	F	61W	0604	190331	52S	38S	25S	12S	1N	14N	28N	41N	54N	66N	76N	
575	4	1	F	89W	0604	205700	52S	39S	25S	12S	1N	14N	27N	41N	54N	66N		
576	5	1	F	117W	0604	225032	52S	39S	26S	12S	0N	14N	27N	41N	54N	66N		
577	6	1	F	146W	0605	004404	52S	39S	26S	12S	0N	14N	27N	40N	53N			
578	7	1	W	174W	0605	023741	52S	39S	26S	12S	0N	14N	27N	41N	53N	66N	76N	76N
579	8	1	W	157E	0605	043120	52S	39S	26S	12S	1N	14N	27N	41N	54N	66N	76N	76N
580	9	1	W	129E	0605	062502	52S	39S	25S	12S	1N	14N	28N	41N	54N	66N	76N	
581	10	1	W	101E	0605	081846	51S	38S	25S	11S	1N	15N	28N	42N	54N	67N	76N	
582	11	1	W	72E	0605	101233	51S	38S	24S	11S	2N	15N	29N	42N	55N	67N	77N	
583	1	1	F	43E	0605	120623	50S	37S	23S	10S	3N	16N	30N	43N	56N	68N	77N	
584	13	1	F	15E	0605	135956	50S	37S	24S	10S	2N	16N	29N	42N	55N	67N	77N	
585	1	1	F	13W	0605	155318	51S	38S	24S	11S	2N	15N	28N	42N	55N	67N	76N	
586	2	1	F	41W	0605	174642	52S	38S	25S	12S	1N	14N	28N	41N	54N	66N	76N	
587	3	1	F	70W	0605	194009	52S	39S	25S	12S	1N	14N	27N	41N	54N	66N		
588	4	1	F	98W	0605	213338	52S	39S	26S	12S	0N	14N	27N	40N	53N	66N		
589	5	1	F	127W	0605	232710	52S	39S	26S	12S	0N	14N	27N	40N	53N			
590	6	1	F	155W	0606	012042	53S	40S	26S	13S	0N	13N	27N	40N	53N			
591	7	1	W	177E	0606	031419	53S	39S	26S	13S	0N	13N	27N	40N	53N	65N	76N	
592	8	1	W	148E	0606	050758	52S	39S	26S	12S	0N	14N	27N	40N	53N	66N	76N	
593	9	1	W	120E	0606	070139	52S	39S	26S	12S	0N	14N	27N	41N	54N	66N	76N	
594	10	1	W	91E	0606	085523	52S	39S	25S	12S	1N	14N	28N	41N	54N	66N	76N	
595	11	1	F	63E	0606	104910	51S	38S	25S	11S	1N	15N	28N	42N	55N	67N	76N	
596	12	1	F	35E	0606	124259	51S	37S	24S	10S	2N	16N	29N	42N	55N	68N	77N	
597	13	1	F	6E	0606	143633	51S	37S	24S	11S	2N	15N	29N	42N	55N	67N	76N	

PASS	TRACK	C	S	ALON	MODA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
598	1	1	F	22W	0606	162955	51S	38S	25S	11S	1N	15N	28N	41N	54N	66	76N	
599	2	1	F	51W	0606	182319	52S	39S	25S	12S	1N	14N	27N	41N	54N	66N	76N	
600	3	1	F	79W	0606	201645	52S	39S	26S	12S	0N	14N	27N	40N	53N	66N		
601	4	1	F	107W	0606	221014	53S	40S	26S	13S	0N	13N	27N	40N	53N	65N		
602	5	1	F	133W	0607	000344	54S	39S	27S	13S	0N	13N	26N	40N	53N			
603	6	1	F	164W	0607	015717	53S	40S	27S	13S	0N	13N	26N	40N	53N			
604	7	1	W	167E	0607	035054	53S	40S	27S	13S	0N	13N	26N	40N	53N	65N	75N	76N
605	8	1	W	139E	0607	054432	53S	40S	26S	13S	0N	13N	26N	40N	53N	65N	75N	76N
606	9	1	W	111E	0607	073814	53S	40S	26S	13S	0N	13N	26N	40N	53N	65N	75N	76N
607	10	1	W	82E	0607	093158	52S	39S	26S	12S	0N	14N	27N	41N	54N	66N	76N	
608	11	1	F	54E	0607	112544	52S	39S	25S	12S	1N	14N	28N	41N	54N	66N	76N	
609	12	1	F	25E	0607	131916	52S	39S	25S	12S	0N	14N	27N	41N	53N	66N	76N	
610	1	1	F	3W	0607	151238	53S	40S	27S	13S	0N	13N	27N	40N	53N	66N	76N	
611	2	1	F	32W	0607	170602	54S	41S	27S	14S	1S	13N	27N	39N	52N	65N	75N	
612	3	1	F	60W	0607	185928	54S	41S	27S	14S	0N	12N	26N	39N	52N	64N	75N	
613	4	1	F	88W	0607	205258	54S	41S	28S	14S	1S	12N	25N	39N	52N	64N		
614	5	1	F	116W	0607	224629	54S	41S	28S	14S	1S	12N	25N	38N	51N	64N		
615	6	1	F	145W	0608	003952	55S	42S	28S	15S	1S	11N	24N	38N	51N			
616	7	1	W	173W	0608	023340	54S	41S	28S	14S	1S	12N	25N	38N	51N	64N	75N	77N
617	8	1	W	158E	0608	042720	54S	41S	28S	14S	1S	12N	25N	39N	52N	64N	75N	77N
618	9	1	W	130E	0608	062102	54S	41S	27S	14S	0N	12N	26N	39N	52N	65N	75N	
619	10	1	W	102E	0608	081446	53S	40S	27S	13S	0N	13N	26N	39N	52N	65N	75N	
620	11	1	W	73E	0608	100833	53S	40S	26S	13S	0N	13N	27N	40N	53N	65N	76N	
621	12	1	F	45E	0608	120222	52S	39S	25S	12S	1N	14N	27N	41N	54N	66N	76N	
622	13	1	F	16E	0608	135556	52S	39S	26S	12S	0N	14N	27N	40N	53N	66N	76N	
623	1	1	F	12W	0608	154917	53S	40S	26S	13S	0N	13N	26N	40N	53N	65N	75N	
624	2	1	F	40W	0608	174241	53S	40S	27S	14S	0N	12N	26N	39N	52N	64N	75N	
625	3	1	F	69W	0608	193608	54S	41S	27S	14S	1S	12N	25N	39N	52N	64N	75N	
626	4	1	F	97W	0608	212937	54S	41S	28S	14S	1S	12N	25N	38N	51N	64N		
627	5	1	F	126W	0608	232309	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N		
628	6	1	F	154W	0609	011646	54S	41S	28S	14S	1S	12N	25N	38N	51N			
629	7	1	W	178E	0609	031023	54S	41S	28S	14S	1S	12N	25N	38N	51N	64N	74N	77N
630	8	1	W	149E	0609	050403	54S	41S	28S	14S	1S	12N	25N	39N	52N	64N	75N	77N
631	9	1	W	121E	0609	065746	54S	41S	27S	14S	0N	12N	26N	39N	52N	64N	75N	
632	10	1	W	92E	0609	085131	53S	40S	27S	13S	0N	13N	26N	39N	52N	65N	75N	
633	11	1	F	64E	0609	104519	53S	40S	26S	13S	0N	13N	27N	40N	53N	66N	76N	
634	12	1	F	36E	0609	123909	52S	39S	25S	12S	1N	14N	28N	41N	54N	66N	76N	
635	13	1	F	7E	0609	143243	52S	39S	26S	12S	0N	14N	27N	40N	53N	66N	76N	
636	1	1	F	21W	0609	162604	53S	40S	26S	13S	0N	13N	26N	40N	53N	65N	75N	
637	2	1	F	50W	0609	181928	53S	40S	27S	13S	0N	12N	26N	39N	52N	64N	75N	
638	3	1	F	78W	0609	201255	54S	41S	27S	14S	0N	12N	25N	39N	52N	64N		
639	4	1	F	106W	0609	220624	54S	41S	28S	14S	1S	12N	25N	38N	51N	64N		
640	5	1	F	135W	0609	235955	54S	41S	28S	15S	1S	11N	25N	38N	51N			
641	6	1	W	163W	0610	015329	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	74N	77N
642	7	1	W	168E	0610	034705	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	74N	77N
643	8	1	W	140E	0610	054044	54S	41S	28S	14S	1S	12N	25N	38N	51N	64N	74N	
644	9	1	W	112E	0610	073425	54S	41S	28S	14S	1S	12N	25N	39N	52N	64N	75N	
645	10	1	W	83E	0610	092809	54S	41S	27S	14S	0N	12N	26N	39N	52N	65N	75N	
646	11	1	F	55E	0610	112156	53S	40S	27S	13S	0N	13N	26N	40N	53N	65N	75N	
647	12	1	F	26E	0610	131527	53S	40S	27S	13S	0N	12N	26N	39N	52N	64N	75N	
648	1	1	F	2W	0610	150848	54S	41S	28S	14S	1S	12N	25N	38N	51N	64N	74N	
649	2	1	F	30W	0610	170211	55S	42S	28S	15S	1S	11N	24N	38N	51N	63N	74N	
650	3	1	F	59W	0610	185036	56S	43S	29S	16N	3N	11N	24N	37N	51N	63N	74N	
651	4	1	F	87W	0610	204904	56S	43S	29S	16S	2S	10N	24N	37N	50N	62N		
652	5	1	F	116W	0610	224235	56S	43S	29S	16S	3S	10N	23N	37N	50N	62N		
653	6	1	F	144W	0611	003615	56S	43S	29S	16S	2S	10N	24N	37N	50N			
654	7	1	W	172W	0611	022951	56S	43S	29S	16S	2S	10N	24N	37N	50N	63N	74N	77N
655	8	1	W	159E	0611	042331	55S	42S	29S	16S	2S	10N	24N	37N	53N	63N	74N	77N
656	9	1	W	131E	0611	061712	55S	42S	29S	15S	2S	11N	24N	37N	51N	63N	74N	
657	10	1	W	103E	0611	081056	55S	42S	28S	15S	1S	11N	25N	38N	51N	64N	74N	
658	11	1	W	74E	0611	100443	54S	41S	28S	14S	1S	12N	25N	39N	52N	64N	75N	
659	12	1	F	46E	0611	115832	54S	40S	27S	14S	0N	12N	26N	39N	52N	65N	75N	
660	13	1	F	17E	0611	135206	54S	41S	27S	14S	0N	12N	25N	39N	52N	64N	75N	
661	1	1	F	11W	0611	154529	54S	41S	28S	14S	1S	11N	25N	38N	51N	64N	74N	
662	2	1	F	39W	0611	173854	55S	42S	28S	15S	2S	11N	24N	38N	51N	63N	74N	
663	3	1	F	68W	0611	193222	55S	42S	29S	15S	2S	11N	24N	37N	50N	63N	74N	
664	4	1	F	96W	0611	212552	55S	42S	29S	16S	2S	10N	24N	37N	50N	63N		
665	5	1	F	125W	0611	231925	56S	43S	29S	16S	2S	10N	24N	37N	50N	63		
666	6	1	F	153W	0612	011257	56S	43S	29S	16S	2S	10N	23N	37N	50N	63N		
667	7	1	W	179E	0612	030634	56S	43S	29S	16S	2S	10N	24N	37N	50N	62N	73N	77N
668	8	1	W	150E	0612	050014	55S	42S	29S	16S	2S	10N	24N	37N	50N	63N	74N	77N
669	9	1	W	122E	0612	065357	55S	42S	29S	15S	2S	11N	24N	37N	51N	63N	74N	
670	10	1	W	93E	0612	084742	55S	42S	28S	15S	1S	11N	25N	38N	51N	64N	74N	
671	11	1	F	65E	0612	104130	54S	41S	28S	14S	1S	12N	25N	39N	52N	64N	75N	
672	12	1	F	37E	0612	123503	54S	41S	28S	14S	1S	11N	25N	38N	51N	64N	74N	

PASS	TRACK	C	S	ALON	MODA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
673	13	1	F	8E	0612	142823	55S	42S	29S	15S	2S	11N	24N	37N	50N	63N	74N	
674	1	1	F	20W	0612	162146	56S	43S	29S	16S	2S	10N	23N	37N	50N	62N	73N	
675	2	1	F	49W	0612	181512	56S	43S	30S	16S	3S	10N	23N	36N	49N	62N	73N	
676	3	1	F	77W	0612	200840	56S	43S	30S	17S	3S	9N	23N	36N	49N	62N	73N	
677	4	1	F	105W	0612	220210	57S	44S	30S	17S	4S	9N	22N	36N	49N	61N		
678	5	1	F	134W	0612	235549	57S	44S	30S	17S	3S	9N	23N	36N	49N	62N		
679	6	1	F	162W	0613	014926	57S	44S	30S	17S	3S	9N	23N	36N	49N			
680	7	1	W	169E	0613	034306	56S	43S	30S	17S	3S	9N	23N	36N	49N	62N	73N	77N
681	8	1	W	141E	0613	053648	56S	43S	30S	16S	3S	10N	23N	37N	50N	62N	73N	
682	9	1	W	113E	0613	073033	56S	43S	29S	16S	2S	10N	24N	37N	50N	63N	74N	
683	10	1	W	84E	0613	092420	55S	42S	29S	15S	2S	11N	24N	38N	51N	63N	74N	
684	11	1	F	56E	0613	111810	54S	41S	28S	14S	1S	12N	25N	38N	51N	64N	75N	
685	12	1	F	27E	0613	131145	54S	41S	28S	15S	1S	11N	25N	38N	51N	63N	74N	
686	1	1	F	1W	0613	150509	55S	42S	29S	15S	2S	11N	24N	37N	50N	63N	74N	
687	2	1	F	29W	0613	165835	55S	42S	29S	16S	2S	10N	24N	37N	50N	63N	74N	
688	3	1	F	58W	0613	185204	56S	43S	29S	16S	3S	10N	23N	37N	50N	62N	73N	
689	4	1	F	86W	0613	204535	56S	43S	30S	16S	3S	10N	23N	36N	49N	62N		
690	5	1	F	115W	0613	223911	56S	43S	30S	16S	3S	10N	23N	36N	50N	62N		
691	6	1	F	143W	0614	003248	56S	43S	30S	16S	3S	10N	23N	37N	50N			
692	7	1	W	171W	0614	022627	56S	43S	29S	16S	2S	10N	23N	37N	50N	62N	73N	77N
693	8	1	W	160E	0614	042008	55S	42S	29S	16S	2S	10N	24N	37N	50N	63N	74N	77N
694	9	1	W	132E	0614	061352	55S	42S	29S	15S	2S	11N	24N	37N	51N	63N		
695	10	1	W	103E	0614	080738	55S	41S	28S	15S	1S	11N	25N	38N	51N	64N	74N	
696	11	1	W	75E	0614	100127	54S	41S	27S	14S	0N	12N	25N	39N	52N	64N	75N	
697	12	1	F	47E	0614	115519	53S	40S	27S	13S	0N	13N	26N	40N	53N	65N	75N	
698	13	1	F	18E	0614	134854	53S	41S	28S	13S	0N	13N	26N	39N	52N	65N	75N	
699	1	1	F	10W	0614	154218	54S	41S	27S	14S	0N	12N	25N	39N	52N	64N	75N	
700	2	1	F	38W	0614	173544	54S	41S	28S	14S	1S	11N	25N	38N	51N	64N	74N	
701	3	1	F	67W	0614	192913	55S	42S	28S	15S	1S	11N	25N	38N	51N	63N	74N	
702	4	1	F	95W	0614	212244	55S	42S	28S	15S	2S	11N	24N	38N	51N	63N	14	15
703	5	1	F	124W	0614	231618	55S	42S	29S	15S	2S	11N	24N	38N	51N	63N	14	15
704	6	1	F	152W	0615	010958	55S	42S	28S	15S	1S	11N	25N	38N	51N	63N		
705	7	1	W	180W	0615	030337	55S	41S	28S	15S	1S	11N	25N	38N	51N	64N	74N	77N
706	8	1	W	151E	0615	045718	54S	41S	28S	14S	1S	12N	25N	38N	51N	64N	74N	77N
707	9	1	W	123E	0615	065102	54S	41S	27S	14S	0N	12N	25N	39N	52N	64N	75N	
708	10	1	W	94E	0615	084449	53S	40S	27S	13S	0N	13N	26N	39N	52N	65N	75N	
709	11	1	F	66E	0615	103838	53S	39S	26S	13S	0N	13N	27N	40N	53N	65N	76N	
710	12	1	F	38E	0615	123229	52S	39S	25S	12S	1N	14N	28N	41N	54N	66N	76N	
711	13	1	F	9E	0615	142604	52S	39S	25S	12S	0N	14N	27N	40N	53N	66N	76N	
712	1	1	F	19W	0615	161927	53S	39S	26S	13S	0N	13N	27N	40N	53N	65N	75N	
713	2	1	F	48W	0615	181252	53S	40S	27S	13S	0N	13N	26N	39N	52N	65N	75N	
714	3	1	F	76W	0615	200621	53S	40S	27S	14S	0N	12N	26N	39N	52N	64N	75N	
715	4	1	F	104W	0615	215950	54S	41S	27S	14S	0N	12N	25N	39N	52N	64N		
716	5	1	F	133W	0615	235324	54S	41S	27S	14S	1S	12N	25N	39N	52N	64N		
717	6	1	F	161W	0616	014659	54S	41S	27S	14S	1S	12N	25N	39N	52N	64N		
718	7	1	W	170E	0616	034037	54S	41S	27S	14S	0N	12N	25N	39N	52N	64N	75N	77N
719	8	1	W	142E	0616	053418	54S	40S	27S	14S	0N	12N	26N	39N	52N	64N	75N	77N
720	9	1	W	114E	0616	072800	53S	40S	27S	13S	0N	13N	26N	39N	52N	65N	75N	
721	10	1	W	85E	0616	092146	53S	40S	26S	13S	0N	13N	27N	40N	53N	65N	75N	
722	11	1	F	57E	0616	111534	52S	39S	26S	12S	0N	14N	27N	41N	54N	66N	76N	
723	12	1	F	28E	0616	130907	52S	39S	26S	12S	0N	13N	27N	40N	53N	65N	75N	
724	1	1	F	0W	0616	150230	53S	40S	26S	13S	0N	13N	26N	39N	52N	65N	75N	
725	2	1	F	29W	0616	171314	54S	41S	28S	14S	1S	13N	26N	39N	53N	64N	75N	
726	3	1	F	57W	0616	184923	54S	41S	27S	14S	1S	12N	25N	39N	52N	64N	75N	
727	4	1	F	85W	0616	204253	54S	41S	28S	14S	1S	12N	25N	38N	51N	64N	74N	
728	5	1	F	114W	0616	223625	54S	41S	28S	14S	1S	11N	25N	38N	51N	64N		
729	6	1	F	142W	0617	003002	54S	41S	28S	14S	1S	12N	25N	38N	51N			
730	7	1	W	170W	0617	022340	54S	41S	28S	14S	1S	12N	25N	38N	51N	64N	74N	77N
731	8	1	W	161E	0617	041720	54S	41S	27S	14S	1S	12N	25N	39N	52N	64N	75N	77N
732	9	1	W	133E	0617	061103	54S	40S	27S	14S	0N	12N	26N	39N	52N	65N	75N	
733	10	1	W	104E	0617	080449	53S	40S	27S	13S	0N	13N	26N	40N	53N	65N	75N	
734	11	1	W	76E	0617	095837	52S	39S	26S	12S	0N	14N	27N	40N	53N	66N	76N	
735	12	1	F	48E	0617	115227	52S	39S	25S	12S	1N	14N	28N	41N	54N	66N	76N	
736	13	1	F	19E	0617	134601	52S	39S	25S	12S	0N	14N	27N	40N	53N	66N	76N	
737	1	1	F	9W	0617	153924	52S	39S	26S	13S	0N	13N	27N	40N	53N	65N	75N	
738	2	1	F	38W	0617	173249	53S	40S	27S	13S	0N	13N	26N	39N	52N	65N	75N	
739	3	1	F	66W	0617	192617	53S	40S	27S	14S	0N	12N	26N	39N	52N	64N		
740	4	1	F	94W	0617	211947	54S	41S	27S	14S	0N	12N	25N	39N	52N	64N		
741	5	1	F	123W	0617	231320	54S	41S	27S	14S	0N	12N	25N	39N	52N	64N		
742	6	1	F	151W	0618	010659	54S	40S	27S	14S	0N	12N	26N	39N	52N	64N		
743	7	1	W	180W	0618	030037	53S	40S	27S	14S	0N	12N	26N	39N	52N	64N	75N	77N
744	8	1	W	152E	0618	045417	53S	40S	27S	13S	0N	13N	26N	39N	52N	65N	75N	77N
745	9	1	W	124E	0618	064801	53S	40S	26S	13S	0N	13N	26N	40N	53N	65N	75N	
746	10	1	W	95E	0618	084146	52S	39S	26S	12S	0N	13N	27N	40N	53N	66N	76N	
747	11	1	W	67E	0618	103534	52S	39S	25S	12S	1N	14N	28N	41N	54N	66N	76N	

PASS	TRACK	C	S	ALON	MODA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
748	12	1	F	39E	0618	122925	51S	38S	24S	11S	1N	15N	28N	42N	55N	67N	76N	
749	13	1	F	10E	0618	142300	51S	38S	25S	11S	1N	15N	28N	41N	54N	66N	76N	
750	1	1	F	18W	0618	161622	52S	39S	25S	12S	1N	14N	27N	40N	53N	66N	76N	
751	2	1	F	47W	0618	180947	52S	39S	26S	13S	1N	13N	28N	40N	53N	66N	76N	
752	3	1	F	75W	0618	200315	53S	40S	26S	13S	0N	11N	27N	40N	53N	65N	76N	
753	4	1	F	103W	0618	215645	53S	40S	27S	13S	1N	13N	27N	41N	52N	65N		
754	5	1	F	132W	0618	235019	53S	40S	27S	13S	0N	13N	26N	39N	52N	65N		
755	6	1	F	160W	0619	014354	53S	40S	27S	13S	0N	13N	26N	39N	52N	65N		
756	7	1	W	171E	0619	033731	53S	40S	27S	13S	0N	13N	26N	39N	52N	65N	75N	76N
757	8	1	W	143E	0619	053112	53S	40S	26S	13S	0N	13N	26N	40N	53N	65N	75N	76N
758	9	1	W	115E	0619	072454	52S	39S	26S	13S	0N	13N	27N	40N	53N	65N	75N	
759	10	1	W	86E	0619	091839	52S	39S	26S	12S	0N	14N	27N	41N	54N	66N	76N	
760	11	1	F	58E	0619	111227	51S	38S	25S	11S	1N	15N	28N	41N	54N	66N	76N	
761	12	1	F	29E	0619	130601	51S	38S	25S	12S	1N	14N	28N	41N	54N	66N	76N	
762	13	1	F	1E	0619	145923	52S	39S	26S	12S	0N	13N	27N	40N	53N	65N	75N	
763	1	1	F	27W	0619	165249	53S	40S	26S	13S	0N	13N	26N	40N	53N	65N	75N	
764	2	1	F	56W	0619	184616	53S	40S	27S	13S	0N	13N	26N	39N	52N	65N	75N	
765	3	1	F	84W	0619	203946	53S	40S	27S	14S	0N	12N	26N	39N	52N	64N		
766	4	1	F	113W	0619	223319	54S	40S	27S	14S	0N	12N	26N	39N	52N	64N		
767	5	1	F	141W	0620	002649	54S	41S	27S	14S	1S	12N	25N	39N	52N			
768	6	1	F	169W	0620	022025	54S	41S	27S	14S	1S	12N	25N	39N	52N			
769	7	1	W	162E	0620	041405	54S	40S	27S	14S	0N	12N	26N	39N	52N	64N	75N	77N
770	8	1	W	134E	0620	060746	53S	40S	27S	13S	0N	12N	26N	39N	52N	65N	75N	77N
771	9	1	W	105E	0620	080131	53S	40S	26S	13S	0N	13N	26N	40N	53N	65N	75N	
772	10	1	W	77E	0620	095517	52S	39S	26S	12S	0N	14N	27N	40N	53N	66N	76N	
773	11	1	F	49E	0620	114907	52S	38S	25S	12S	1N	14N	28N	41N	54N	66N	76N	
774	12	1	F	20E	0620	134241	52S	39S	25S	12S	0N	14N	27N	40N	53N	66N	76N	
775	1	1	F	8W	0620	153604	52S	39S	26S	13S	0N	13N	27N	40N	53N	65N	75N	
776	2	1	F	37W	0620	172929	53S	40S	27S	13S	0N	13N	26N	39N	52N	65N	75N	
777	3	1	F	65W	0620	192256	53S	40S	27S	14S	0N	12N	26N	39N	52N	64N		
778	4	1	F	93W	0620	211626	54S	41S	27S	14S	0N	12N	25N	39N	52N	64N		
779	5	1	F	122W	0620	230959	54S	41S	27S	14S	1S	12N	25N	39N	52N	64N		
780	6	1	F	150W	0621	010338	54S	41S	27S	14S	0N	12N	25N	39N	52N	64N		
781	7	1	W	179W	0621	025715	54S	40S	27S	14S	0N	12N	26N	39N	52N	64N	75N	77N
782	8	1	W	153E	0621	045056	53S	40S	27S	13S	0N	12N	26N	39N	52N	65N	75N	77N
783	9	1	W	125E	0621	064439	53S	40S	26S	13S	0N	13N	26N	40N	53N	65N	75N	
784	10	1	W	96E	0621	083824	52S	39S	26S	13S	0N	13N	27N	40N	53N	65N	76N	
785	11	1	W	68E	0621	103212	52S	39S	25S	12S	1N	14N	27N	41N	54N	66N	76N	
786	12	1	F	39E	0621	122602	51S	38S	25S	11S	1N	15N	28N	41N	54N	67N	76N	
787	13	1	F	11E	0621	141936	51S	38S	25S	11S	1N	14N	28N	41N	54N	66N	76N	
788	1	1	F	17W	0621	161259	52S	39S	25S	12S	0N	14N	27N	40N	53N	66N	76N	
789	2	1	F	46W	0621	180624	52S	39S	26S	13S	0N	13N	27N	40N	53N	65N	75N	
790	3	1	F	74W	0621	195952	53S	40S	26S	13S	0N	13N	26N	39N	52N	65N		
791	4	1	F	102W	0621	215322	53S	40S	27S	13S	0N	13N	26N	39N	52N	65N		
792	5	1	F	131W	0621	234654	53S	40S	27S	13S	0N	12N	26N	39N	52N	64N		
793	6	1	F	159W	0622	014029	53S	40S	27S	14S	0N	12N	26N	39N	52N	64N		
794	7	1	W	172E	0622	033406	53S	40S	27S	13S	0N	12N	26N	39N	52N	65N	75N	77N
795	8	1	W	144E	0622	052746	53S	40S	27S	13S	0N	13N	26N	39N	52N	65N	75N	76N
796	9	1	W	116E	0622	072129	53S	40S	26S	13S	0N	13N	26N	40N	53N	65N	75N	
797	10	1	W	87E	0622	091514	52S	39S	26S	12S	0N	14N	27N	40N	53N	66N	76N	
798	11	1	F	59E	0622	110901	52S	39S	25S	12S	1N	14N	28N	41N	54N	66N	76N	
799	12	1	F	30E	0622	130235	52S	39S	25S	12S	0N	14N	27N	40N	53N	66N	76N	
800	13	1	F	2E	0622	145557	52S	39S	26S	13S	0N	13N	26N	40N	53N	65N	75N	
801	1	1	F	26W	0622	164923	53S	40S	27S	13S	0N	13N	26N	39N	52N	65N	75N	
802	2	1	F	55W	0622	184250	53S	40S	27S	14S	0N	12N	26N	39N	52N	64N	75N	
803	3	1	F	83W	0622	203620	54S	41S	27S	14S	0N	12N	25N	39N	52N	64N		
804	4	1	F	112W	0622	222953	54S	41S	27S	14S	1S	12N	25N	38N	51N	64N		
805	5	1	F	140W	0623	002327	54S	41S	28S	14S	1S	12N	25N	38N	51N			
806	6	1	W	168W	0623	021704	54S	41S	27S	14S	1S	12N	25N	38N	52N	64N	75N	77N
807	7	1	W	163E	0623	041044	54S	41S	27S	14S	0N	12N	25N	39N	52N	64N	75N	77N
808	8	1	W	135E	0623	060426	53S	40S	27S	13S	0N	12N	26N	39N	52N	65N	75N	
809	9	1	W	106E	0623	075811	53S	40S	26S	13S	0N	13N	26N	40N	53N	65N	75N	
810	10	1	W	78E	0623	095159	52S	39S	26S	12S	0N	14N	27N	40N	53N	66N	76N	
811	11	1	F	50E	0623	114549	52S	38S	25S	12S	1N	14N	28N	41N	54N	66N	76N	
812	12	1	F	21E	0623	133924	52S	38S	25S	12S	1N	14N	27N	41N	53N	66N	76N	
813	1	1	F	7W	0623	153246	52S	39S	26S	13S	0N	13N	27N	40N	53N	65N	75N	
814	2	1	F	36W	0623	172611	53S	40S	26S	13S	0N	13N	26N	39N	52N	65N	75N	
815	3	1	F	64W	0623	191939	53S	40S	27S	13S	0N	12N	26N	39N	52N	64N	75N	
816	4	1	F	92W	0623	211309	53S	40S	27S	14S	0N	12N	26N	39N	52N	64N		
817	5	1	F	121W	0623	230642	54S	41S	27S	14S	0N	12N	25N	39N	52N	64N		
818	6	1	F	149W	0624	010022	53S	40S	27S	14S	0N	12N	26N	39N	52N			
819	7	1	W	178W	0624	025401	53S	40S	27S	13S	0N	12N	26N	39N	52N	65N	75N	77N
820	8	1	W	154E	0624	044741	53S	40S	27S	13S	0N	13N	26N	39N	52N	65N	75N	76N
821	9	1	W	126E	0624	064124	53S	40S	26S	13S	0N	13N	26N	40N	53N	65N	75N	
822	10	1	W	97E	0624	083510	52S	39S	26S	12S	0N	14N	27N	40N	53N	66N	76N	

PASS	TRACK	C	S	ALON	MODA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
823	11	1	W	69E	0624	102858	52S	38S	25S	12S	1N	14N	28N	41N	54N	66N	76N	
824	12	1	F	40E	0624	122249	51S	38S	24S	11S	2N	15N	28N	42N	55N	67N	76N	
825	13	1	F	12E	0624	141623	51S	38S	24S	11S	1N	15N	28N	41N	54N	66N	76N	
826	1	1	F	16W	0624	160946	52S	38S	25S	12S	1N	14N	27N	41N	54N	66N	76N	
827	2	1	F	45W	0624	180311	52S	39S	26S	12S	0N	14N	27N	40N	53N	65N	75N	
828	3	1	F	73W	0624	195639	52S	39S	26S	13S	0N	13N	27N	40N	53N	65N		
829	4	1	F	102W	0624	215009	53S	40S	26S	13S	0N	13N	26N	39N	52N	65N		
830	5	1	F	130W	0624	234345	53S	40S	26S	13S	0N	13N	26N	40N	53N			
831	6	1	F	158W	0625	013721	53S	40S	26S	13S	0N	13N	26N	40N	53N			
832	7	1	W	173E	0625	033059	53S	39S	26S	13S	0N	13N	26N	40N	53N	65N	75N	76N
833	8	1	W	145E	0625	052440	52S	39S	26S	13S	1N	12N	27N	41N	53N	66N	76N	
834	9	1	W	116E	0625	071823	53S	39S	27S	13S	1N	14N	27N	41N	53N	66N	76N	
835	10	1	W	87E	0625	091209	52S	39S	26S	13S	2N	15N	27N	42N	54N	67N	77N	
836	1	1	F	58E	1625	110557	52S	38S	25S	12S	3S	14N	28N	43N	53N	68N	77N	
837	12	1	F	34E	0625	125947	51S	38S	24S	10S	2N	16N	29N	42N	55N	68N	77N	
838	13	1	F	3E	0625	145322	50S	37S	24S	10S	2N	15N	29N	42N	55N	67N	76N	
839	1	1	F	25W	0625	164645	51S	38S	24S	11S	1N	15N	28N	41N	54N	66N	76N	
840	2	1	F	54W	0625	184010	51S	38S	25S	12S	1N	14N	28N	41N	54N	66N	76N	
841	3	1	F	82W	0625	203337	52S	39S	25S	12S	0N	14N	27N	40N	53N	66N		
842	4	1	F	111W	0625	222708	52S	39S	26S	12S	0N	14N	27N	40N	53N	66N		
843	5	1	F	139W	0626	002039	52S	39S	26S	12S	0N	13N	27N	40N	53N			
844	6	1	F	167W	0626	021414	52S	39S	26S	13S	0N	13N	27N	40N	53N	65N	75N	76N
845	7	1	W	164E	0626	040751	52S	39S	26S	12S	0N	13N	27N	40N	53N	65N	76N	76N
846	8	1	W	136E	0626	060131	52S	39S	26S	12S	0N	14N	27N	40N	53N	66N	76N	
847	9	1	W	107E	0626	075513	52S	39S	25S	12S	1N	14N	27N	41N	54N	66N	76N	
848	10	1	W	79E	0626	094858	51S	38S	25S	11S	1N	15N	28N	41N	54N	66N	76N	
849	11	1	F	51E	0626	114245	51S	38S	24S	11S	2N	15N	28N	42N	55N	67N	76N	
850	12	1	F	22E	0626	133618	51S	38S	24S	11S	1N	15N	28N	41N	54N	66N	76N	
851	1	1	F	6W	0626	152940	52S	38S	25S	12S	1N	14N	27N	41N	54N	66N	76N	
852	2	1	F	35W	0626	172304	52S	39S	26S	12S	0N	13N	27N	40N	53N	65N	75N	
853	3	1	F	63W	0626	191630	53S	40S	26S	13S	0N	13N	26N	40N	53N	65N	75N	
854	4	1	F	91W	0626	210959	53S	40S	27S	13S	0N	13N	26N	39N	52N	65N		
855	5	1	F	120W	0626	230331	53S	40S	27S	13S	0N	12N	26N	39N	52N	65N		
856	6	1	F	148W	0627	005706	53S	40S	27S	13S	0N	12N	26N	39N	52N	65N		
857	7	1	W	177W	0627	025042	53S	40S	27S	13S	0N	13N	26N	39N	52N	65N	75N	77N
858	8	1	W	155E	0627	044422	53S	40S	27S	13S	0N	13N	26N	39N	52N	65N	75N	
859	9	1	W	127E	0627	063804	53S	40S	26S	13S	0N	13N	26N	40N	53N	65N	75N	
860	10	1	W	98E	0627	083148	52S	39S	26S	12S	0N	14N	27N	40N	53N	66N	76N	
861	11	2	W	70E	0627	102443	54S	41S	28S	14S	1S	11N	25N	38N	51N	64N	74N	
862	12	2	F	41E	0627	121832	54S	41S	27S	14S	0N	12N	26N	39N	52N	64N	75N	
863	13	2	F	13E	0627	141206	54S	41S	27S	14S	1S	12N	25N	38N	51N	64N	74N	
864	1	2	F	15W	0627	160529	54S	41S	28S	15S	1S	11N	24N	38N	51N	63N	74N	
865	2	2	F	44W	0627	175854	55S	42S	29S	15S	2S	11N	24N	37N	50N	63N	74N	
866	3	2	F	72W	0627	195222	55S	42S	29S	16S	2S	10N	24N	37N	50N	62N		
867	4	2	F	101W	0627	214552	55S	43S	29S	16S	2S	10N	23N	37N	50N	62N		
868	5	2	F	129W	0627	233922	56S	43S	30S	16S	3S	10N	23N	36N	49N	62N		
869	6	2	F	157W	0628	013258	56S	43S	30S	16S	3S	10N	23N	36N	49N	62N		
870	7	2	W	174E	0628	032636	56S	43S	29S	16S	3S	10N	23N	37N	50N	62N	73N	77N
871	8	2	W	146E	0628	052017	55S	42S	29S	16S	2S	10N	24N	37N	50N	62N	74N	77N
872	9	2	W	117E	0628	071400	55S	42S	29S	15S	2S	11N	24N	37N	50N	63N	74N	
873	10	2	W	89E	0628	090746	55S	42S	28S	15S	1S	11N	24N	38N	51N	63N	74N	
874	11	2	F	61E	0628	110134	54S	41S	28S	14S	1S	12N	25N	38N	51N	64N	75N	
875	12	2	F	32E	0628	125525	53S	40S	27S	13S	0N	13N	26N	39N	52N	65N	75N	
876	13	2	F	4E	0628	144901	53S	40S	27S	14S	0N	12N	26N	39N	52N	64N	75N	
877	1	2	F	25W	0628	164226	54S	41S	27S	14S	1S	12N	25N	38N	51N	64N	74N	
878	2	2	F	53W	0628	183553	54S	41S	28S	15S	1S	11N	25N	38N	51N	63N	74N	
879	3	2	F	81W	0628	202923	54S	42S	28S	15S	2S	11N	24N	37N	50N	62N		
880	4	2	F	110W	0628	222256	55S	42S	28S	15S	2S	11N	24N	38N	51N	63N		
881	5	2	F	138W	0629	001625	55S	42S	29S	15S	2S	11N	24N	37N	50N			
882	6	2	F	166W	0629	021002	55S	42S	29S	15S	2S	11N	24N	37N	50N			
883	7	2	W	165E	0629	040342	55S	42S	28S	15S	2S	11N	24N	38N	51N	63N	74N	77N
884	8	2	W	137E	0629	055724	54S	41S	28S	15S	1S	11N	25N	38N	51N	64N	74N	77N
885	9	2	W	108E	0629	075109	54S	41S	28S	14S	1S	12N	25N	38N	51N	64N	75N	
886	10	2	W	80E	0629	094456	53S	40S	27S	14S	0N	12N	26N	39N	52N	64N	75N	
887	11	2	F	52E	0629	113846	53S	40S	26S	13S	0N	13N	26N	40N	53N	65N	75N	
888	12	2	F	23E	0629	133221	53S	40S	26S	13S	0N	13N	26N	39N	52N	65N	75N	
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890	2	2	F	34W	0629	171911	54S	41S	27S	14S	1S	12N	25N	38N	51N	64N	74N	
891	3	2	F	62W	0629	191240	54S	41S	28S	14S	1S	11N	25N	38N	51N	63N	74N	
892	4	2	F	90W	0629	210611	54S	41S	28S	15S	1S	11N	24N	38N	51N	63N		
893	5	2	F	119W	0629	225945	54S	41S	28S	15S	1S	11N	24N	38N	51N	63N		
894	6	2	F	147W	0630	005319	54S	41S	28S	15S	1S	11N	24N	38N	51N	63N		
895	7	2	W	176W	0630	024658	54S	41S	28S	15S	1S	11N	25N	38N	51N	63N	74N	77N
896	8	2	W	156E	0630	044038	54S	41S	28S	14S	1S	11N	25N	38N	51N	64N	74N	77N
897	9	2	W	128E	0630	063422	54S	41S	27S	14S	1S	12N	25N	39N	52N	64N		

PASS	TRACK	C	S	ALON	MODA	HRMNSE	SUB-SATELLITE POINT PICTURE LOCATION											
							LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT	LAT
898	10	2	W	99E	0630	082808	53S	40S	27S	13S	0N	12N	26N	39N	52N	65N	75N	
899	11	2	F	71E	0630	102156	53S	40S	26S	13S	0N	13N	26N	40N	53N	65N	75N	76N
900	12	2	F	42E	0630	121547	53S	39S	26S	13S	1N	14N	27N	41N	54N	67N	76N	
901	13	2	F	13E	0630	140923	52S	39S	26S	12S	0N	14N	27N	40N	53N	65N	75N	
902	1	2	F	14W	0630	160246	52S	39S	26S	13S	0N	13N	26N	40N	52N	65N	75N	
903	2	2	F	43W	0630	175613	53S	40S	27S	13S	0N	13N	26N	39N	52N	65N	75N	
904	3	2	F	71W	0630	194941	53S	40S	27S	14S	0N	12N	25N	39N	52N	64N		
905	4	1	F	100W	0630	214313	54S	41S	28S	14S	1N	13N	24N	38N	52N	64N		
906	5	1	F	128W	0630	233644	54S	42	28S	14S	2N	12N	26N	38N	52N	64N		

TABLE 1

TRACK TABLE FOR ESSA 3

Range of Ascending Nodes	Track No.
0 - 28.7W	1
28.7W - 57.4W	2
57.4W - 86.1W	3
86.1W - 114.8W	4
114.8W - 143.5W	5
143.5W - 172.2W	6
172.2W - 159.1E	7
159.1E - 130.4E	8
130.4E - 101.7E	9
101.7E - 73.0E	10
73.0E - 44.3E	11
44.3E - 15.6E	12
15.6E - 0	13

Difference between Tracks - 28.7°

TABLE 2

TRACK TABLE FOR ESSA 5

Range of Ascending Nodes	Track No.
0 - 28.4W	1
28.4W - 56.8W	2
56.8W - 85.2W	3
85.2W - 113.6W	4
113.6W - 142.0W	5
142.0W - 170.4W	6
170.4W - 161.2E	7
161.2E - 132.8E	8
132.8E - 104.4E	9
104.4E - 76.0E	10
76.0E - 47.6E	11
47.6E - 19.2E	12
19.2E - 0	13

Difference between Tracks - 28.4°

Day to day variations and irregularities which result in improper locating or display of the data are apparent in this catalog. At present, inadequate computer facilities prevent any effort to reformat the mosaic image on an after-the-fact basis. Those days with obvious problems are listed below in chronological order:

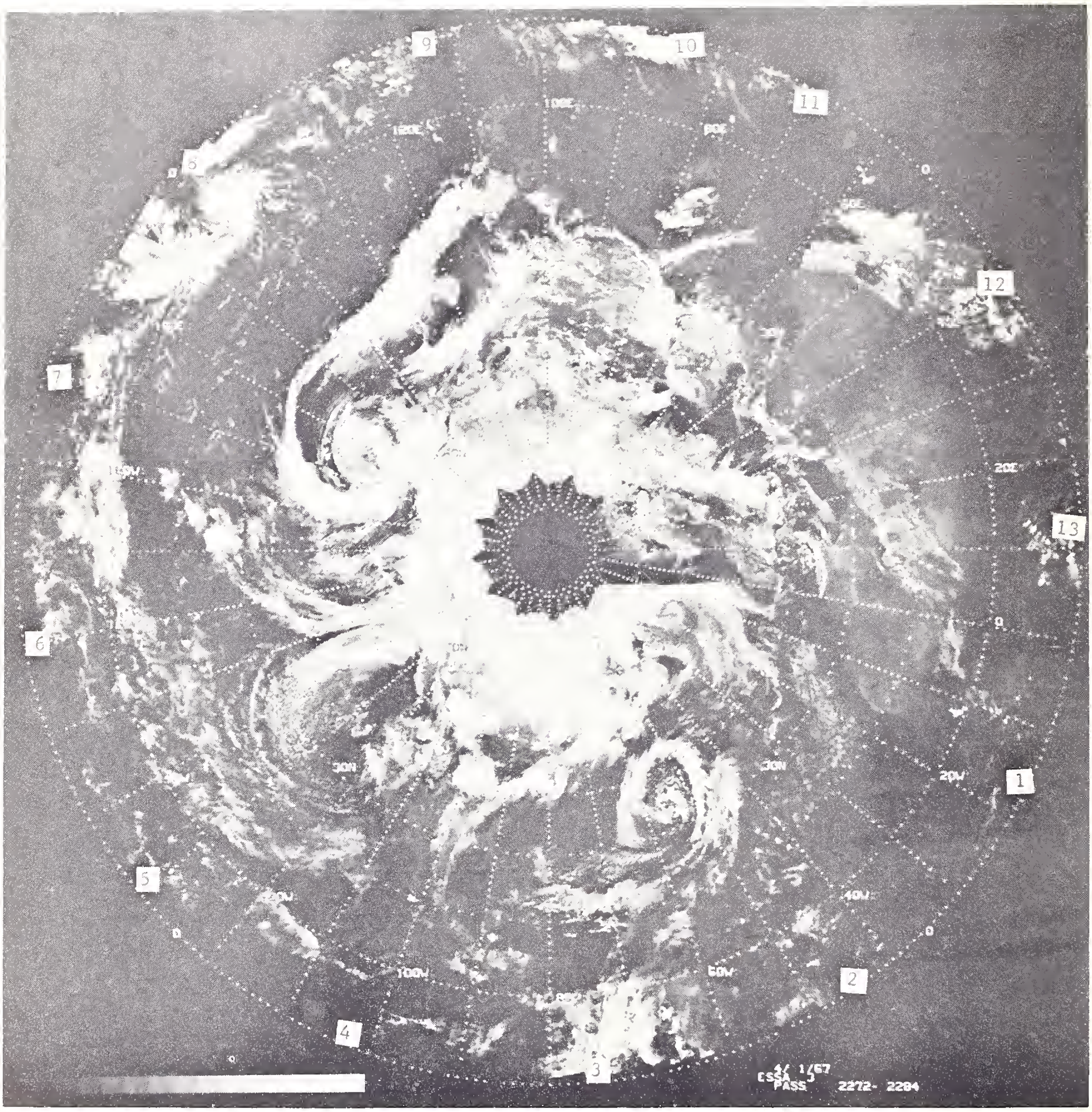
DATE	AREA	REASON
4/ 4/67	N. Pole	Grey scale pattern inserted for missing frame.
4/ 5/67	90 E	One pass missing
4/ 7/67	N. Pole	Grey scale pattern inserted for missing frame.
4/ 9/67	180 W	One frame had garbled signal.
4/10/67	140 E	One pass unreadable due to poor signal.
4/24/67	80 W	Part of one pass garbled due to poor signal.
5/ 5/67	170 W	Pass offset by one frame.
5/14/67	140 W	One frame garbled due to poor signal.
5/16/67	All	Horizontal streaks injected by computer malfunction.
5/23/67	80 E	Frames out of vertical sync.
5/24/67	130 E	Frames out of vertical sync.
6/ 1/67	All1), 120 E	Switched to ESSA 5 data. Pass offset by one frame.[2]
6/ 2/67	100 E-20 E	3 Passes interchanged.
6/ 3/67	150 E-60 E	3 Passes offset by a frame.[2]
6/ 4/67	All	Output not available due to computer problems.
6/16/67	80 E-40 E, 80 W	2 Passes interchanged, 1 Pass offset by a frame.
6/19/67	160 E-40 E	4 Passes clipped due to error in solar illumination correction program.

1) ESSA 5 cameras were more responsive than ESSA 3 cameras, therefore the data suddenly appears more profuse and brighter.

2) Tape recorder problems aboard the ESSA 5 satellite prevented processing of the first frame of data of each readout sequence, thus affecting the computer logic to locate the data in the expected sequence.

Some other inconsistencies are related to photographic and printing problems. Original film negatives may not exhibit these problems. Any comments pertaining to the Catalog of Meteorological Satellite Data - ESSA 3 and ESSA 5 Television Cloud Photography Part 3, will be welcomed and should be addressed to:

Chief, Documentation Section
National Environmental Satellite Center
Environmental Science Services Administration
Washington, D. C. 20233



9
10
11
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13
6
1
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4
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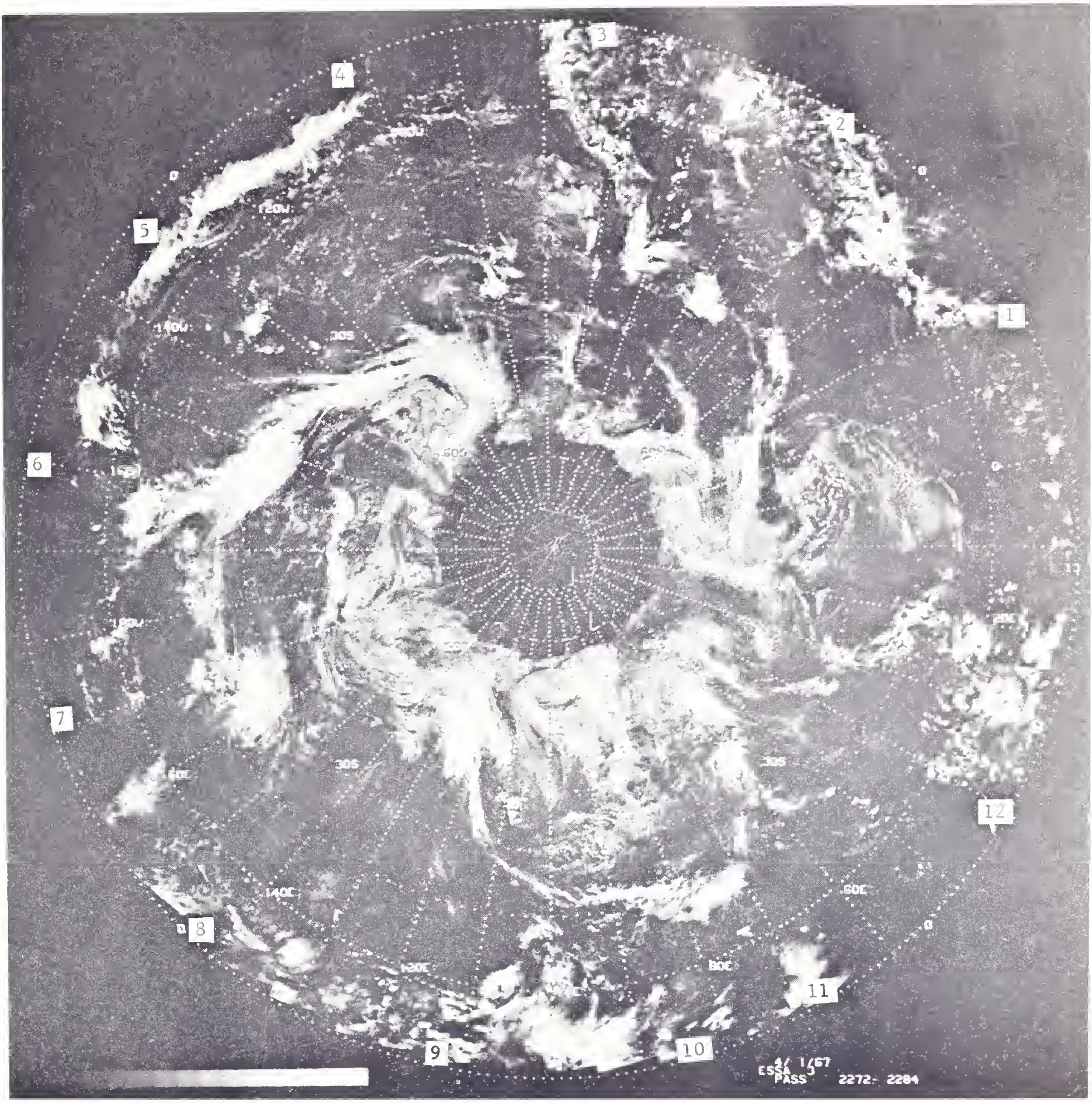
120E
100E
80E
60E
20E
0
20W
40W
60W
100W
140W
160W
30N
4/ 1/67
ESSA 3
PASS 2272- 2284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30S
1
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160W
60S
0
180W
20E
7
30S
30S
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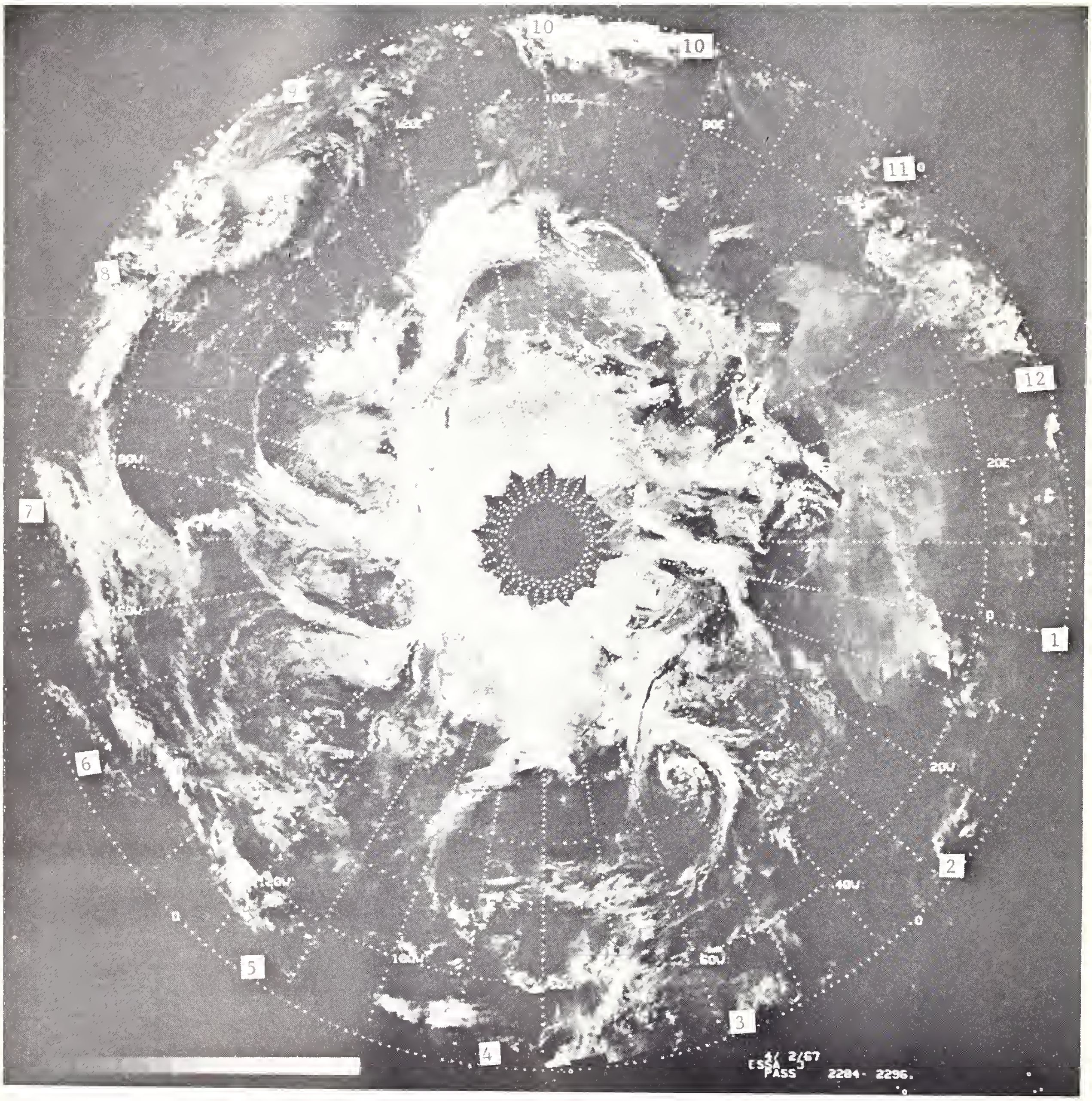
160E
140E
60E
8
120E
80E
11
9
10
4/ 1/67
ESSA 3
PASS 2272- 2284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120E
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160E
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20E
7
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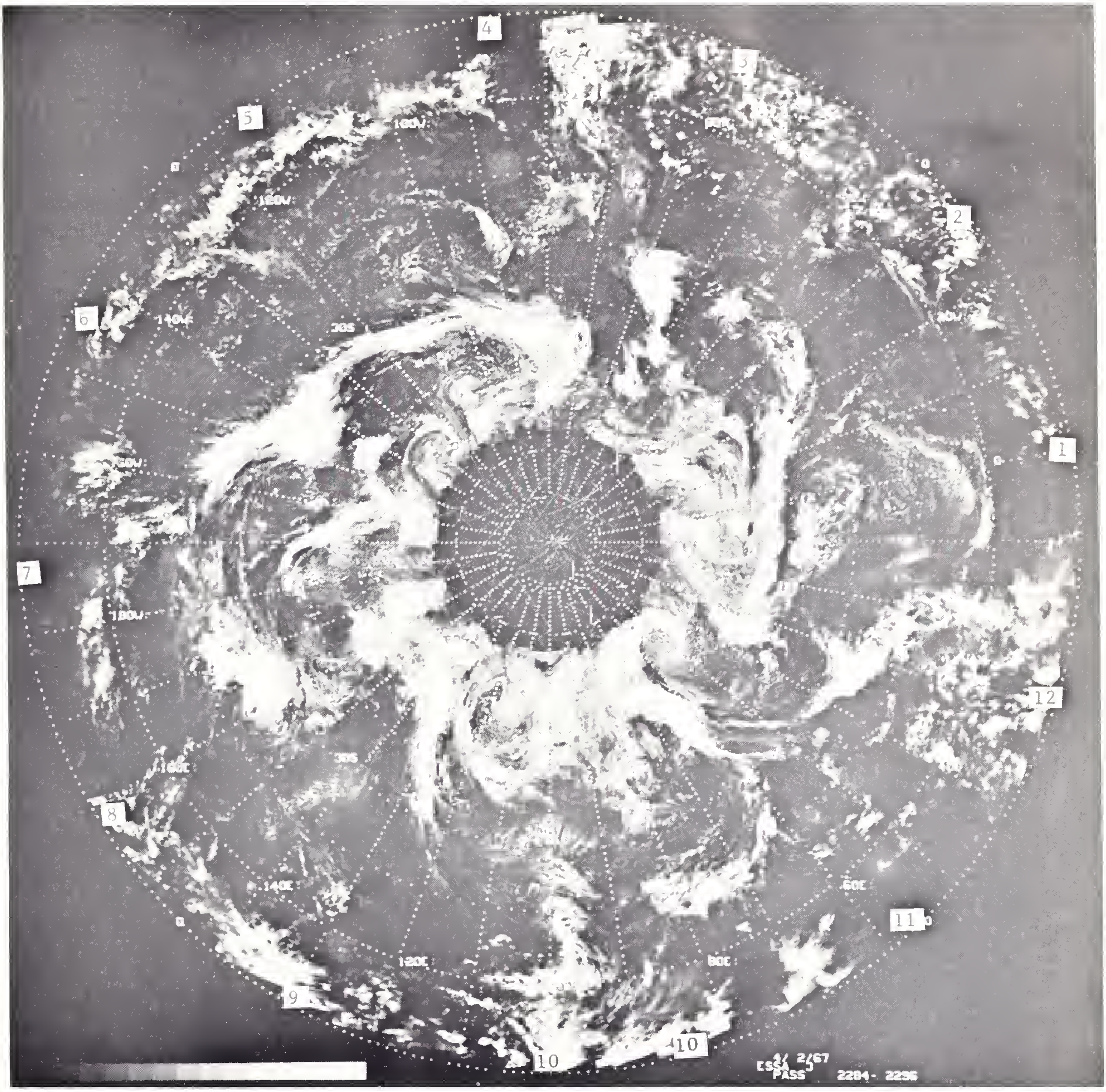
2
40W
0
5
100W
60W
3
4
4/ 2/67
ESSA 3
PASS 2284 - 2296.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2
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80W
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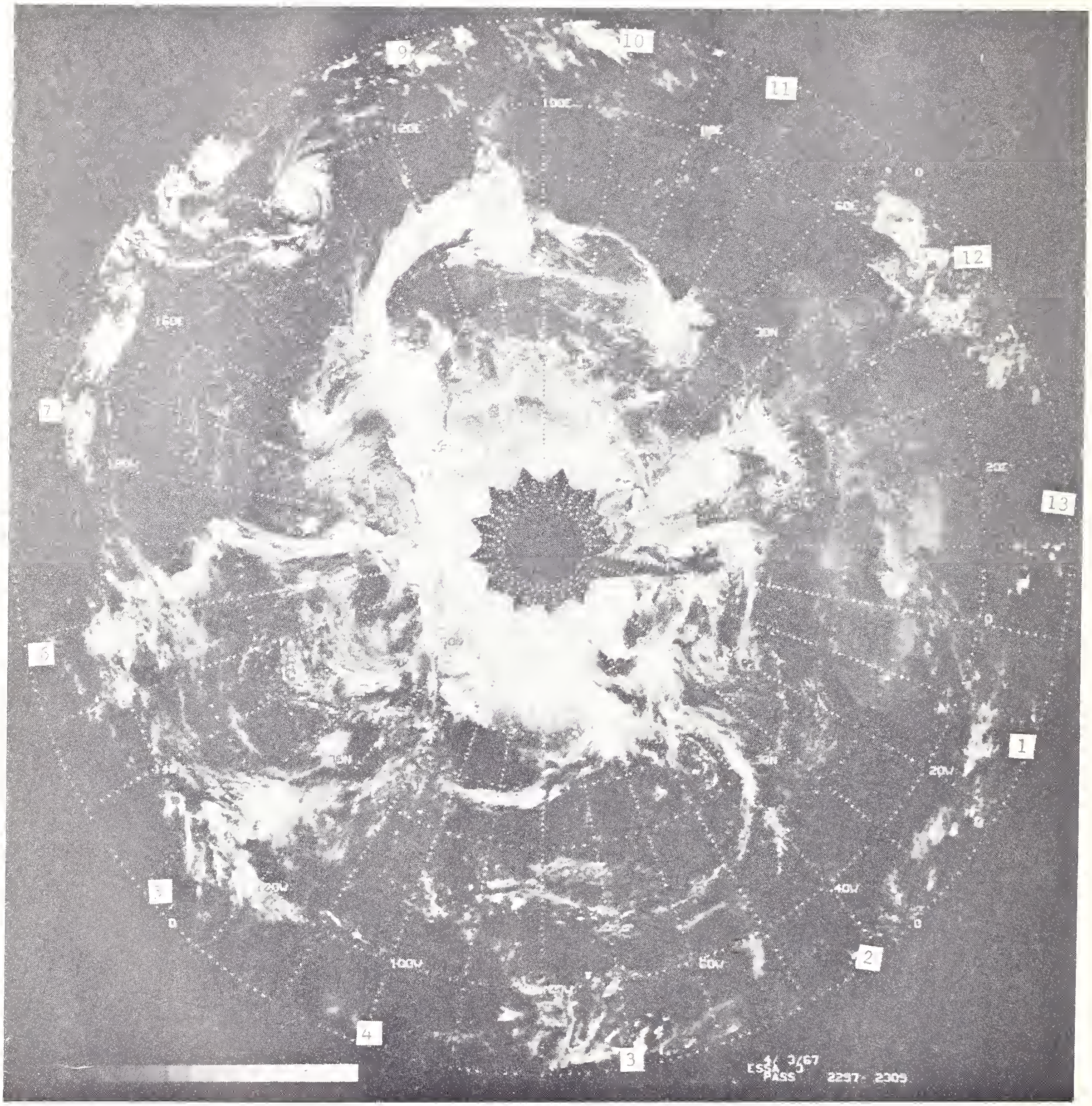
160W
0
7
180W
12
160E
30S
8
140E
60E
11
120E
80E
9
10
10
4/ 2/67
ESSA 3
PASS 2284- 2296



1
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100E
120E
80E
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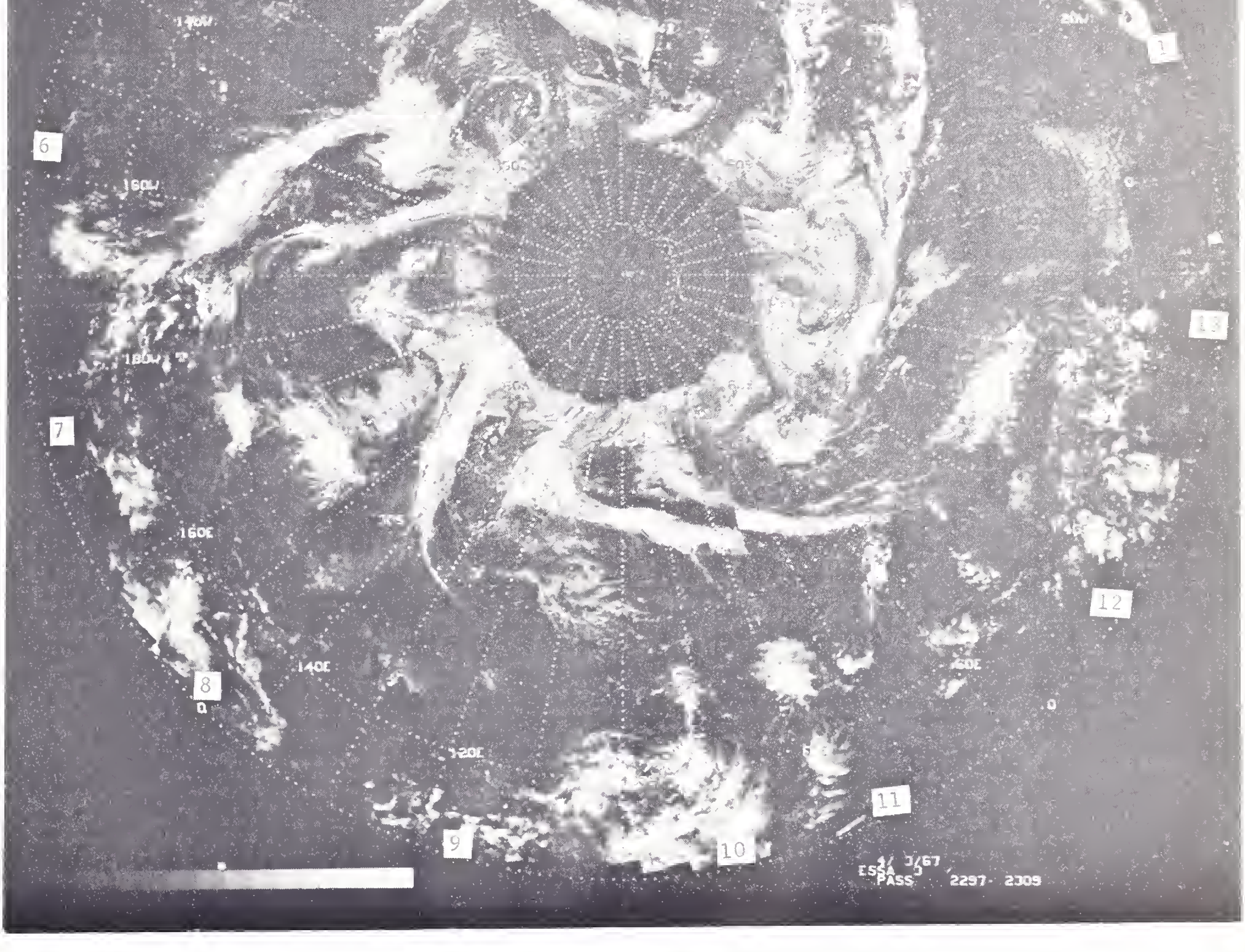
180W
30N
20E
20W
40W
60W
100W
120W
4/ 3/67
ESSA 3
PASS 2297- 2309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60E
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40W
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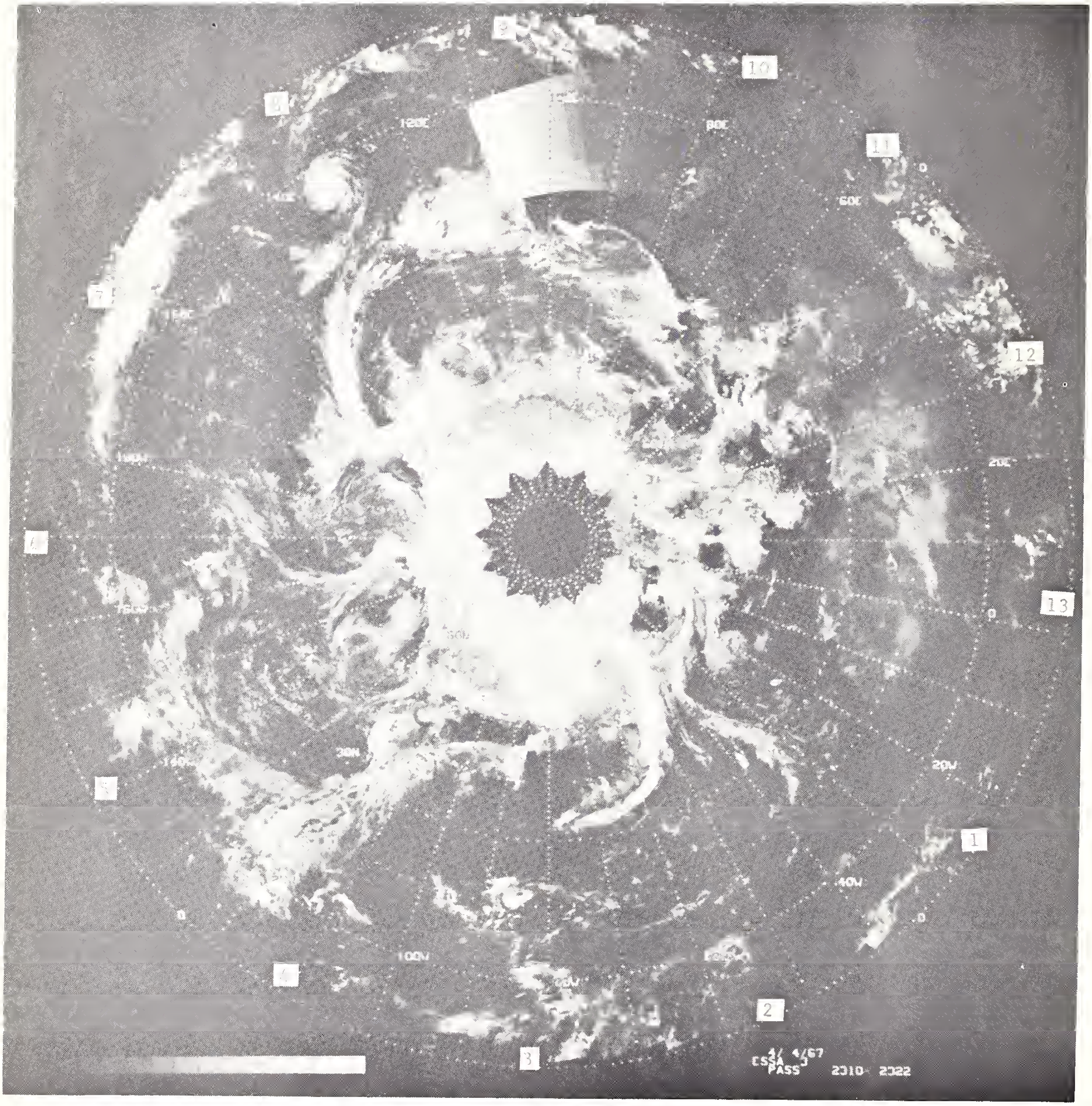
0
4/ 3/67
ESSA 3
PASS 2297- 2309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140W
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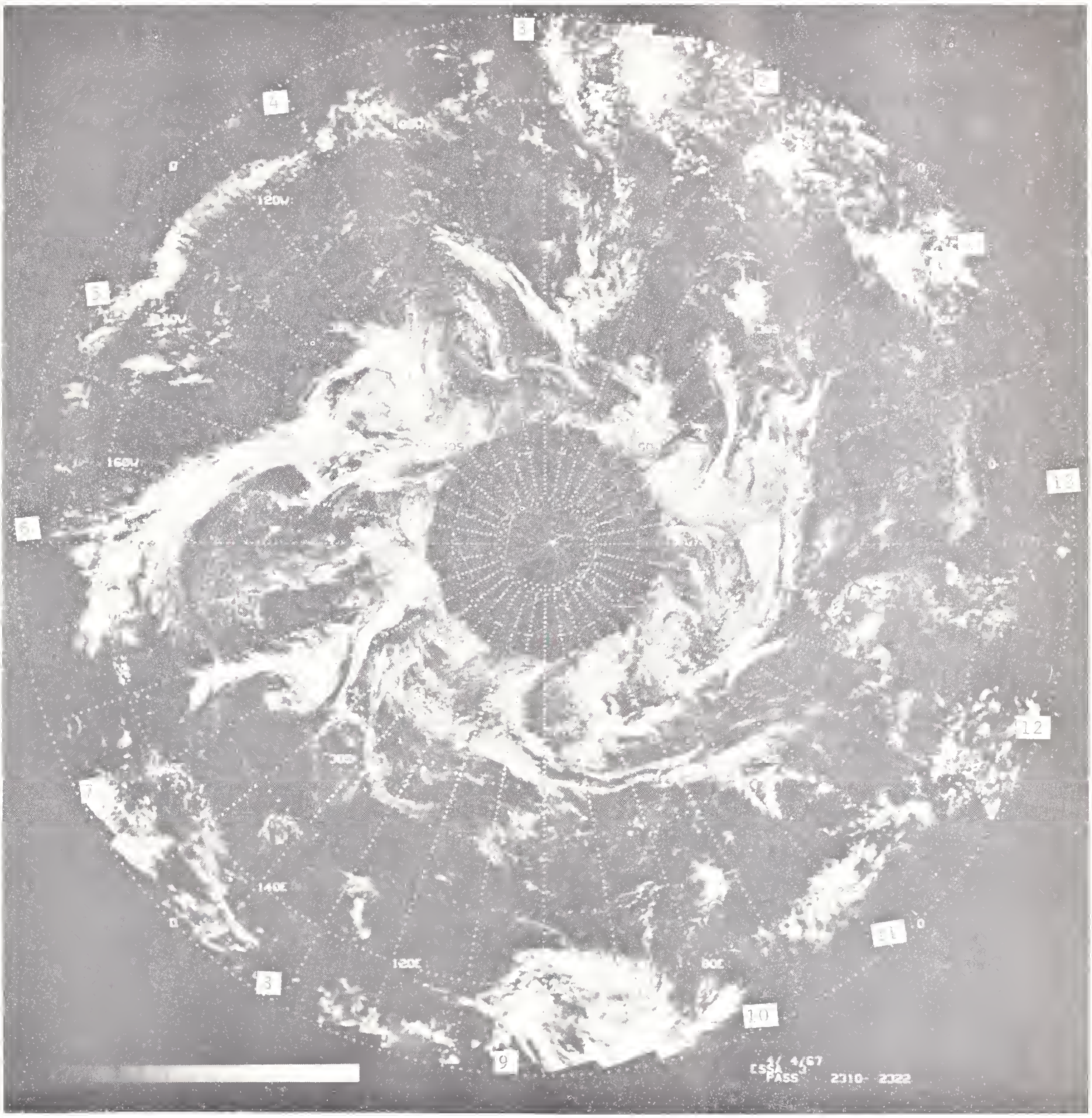
0
100W
4
80W
60W
2
3
4/ 4/67
ESSA 3
PASS 2310- 2322



3
2
4
1
120W
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160W
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13
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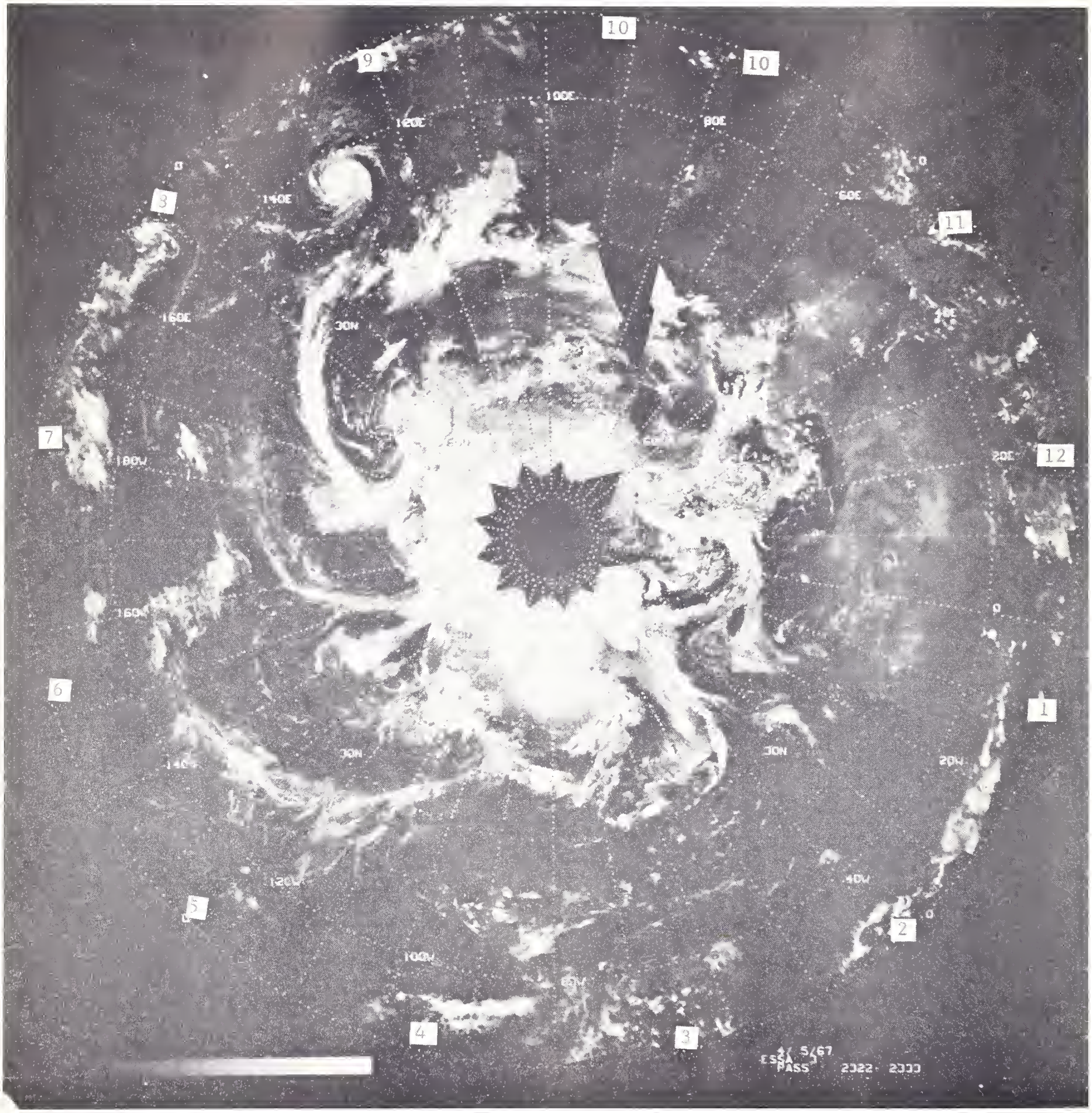
7
140E
8
120E
80E
11
10
9
1/ 4/67
ESSA 3
PASS 2310- 2322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160E
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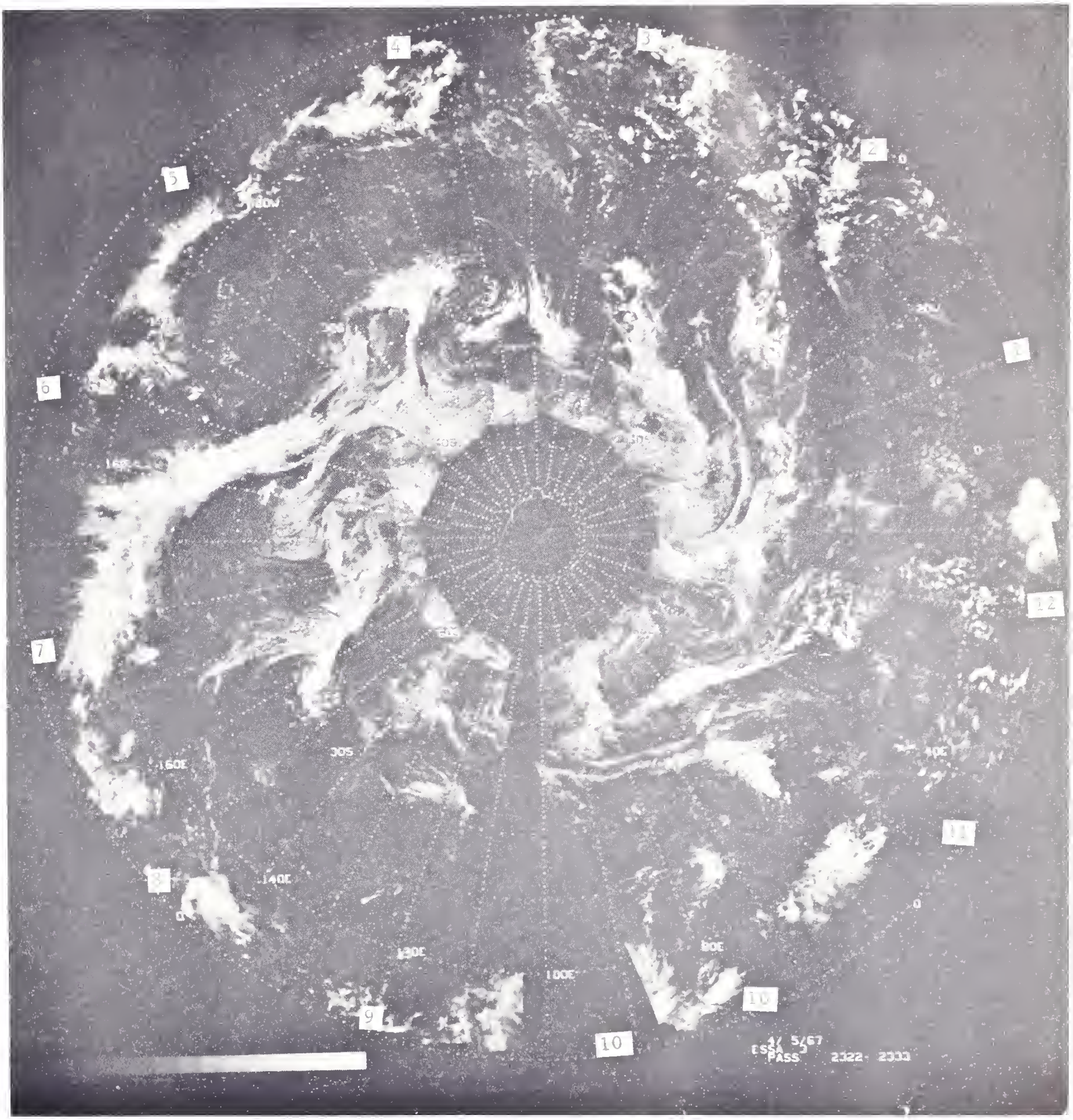
40E
7
180W
20E
12
160W
0
6
1
140W
30N
30N
20W
120W
40W
5
2
0
100W
80W
4
3
4/ 5/67
ESSA 5
PASS 2322- 2333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180W
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60S
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160W
12
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30S
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140E
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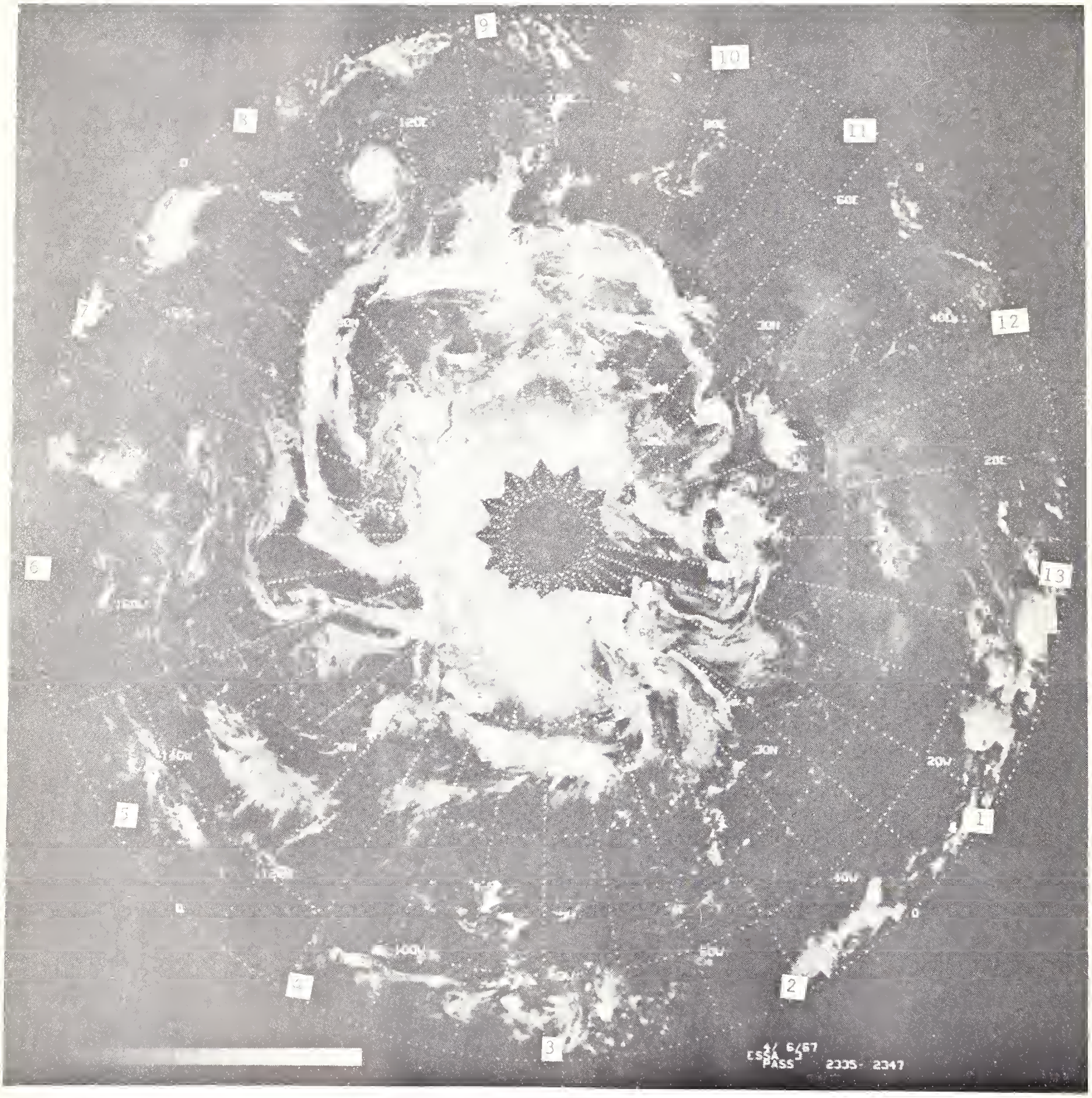
120E
80E
100E
10
9
10
4/ 5/67
ESSA 3
PASS 2322- 2333

9
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20E
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13
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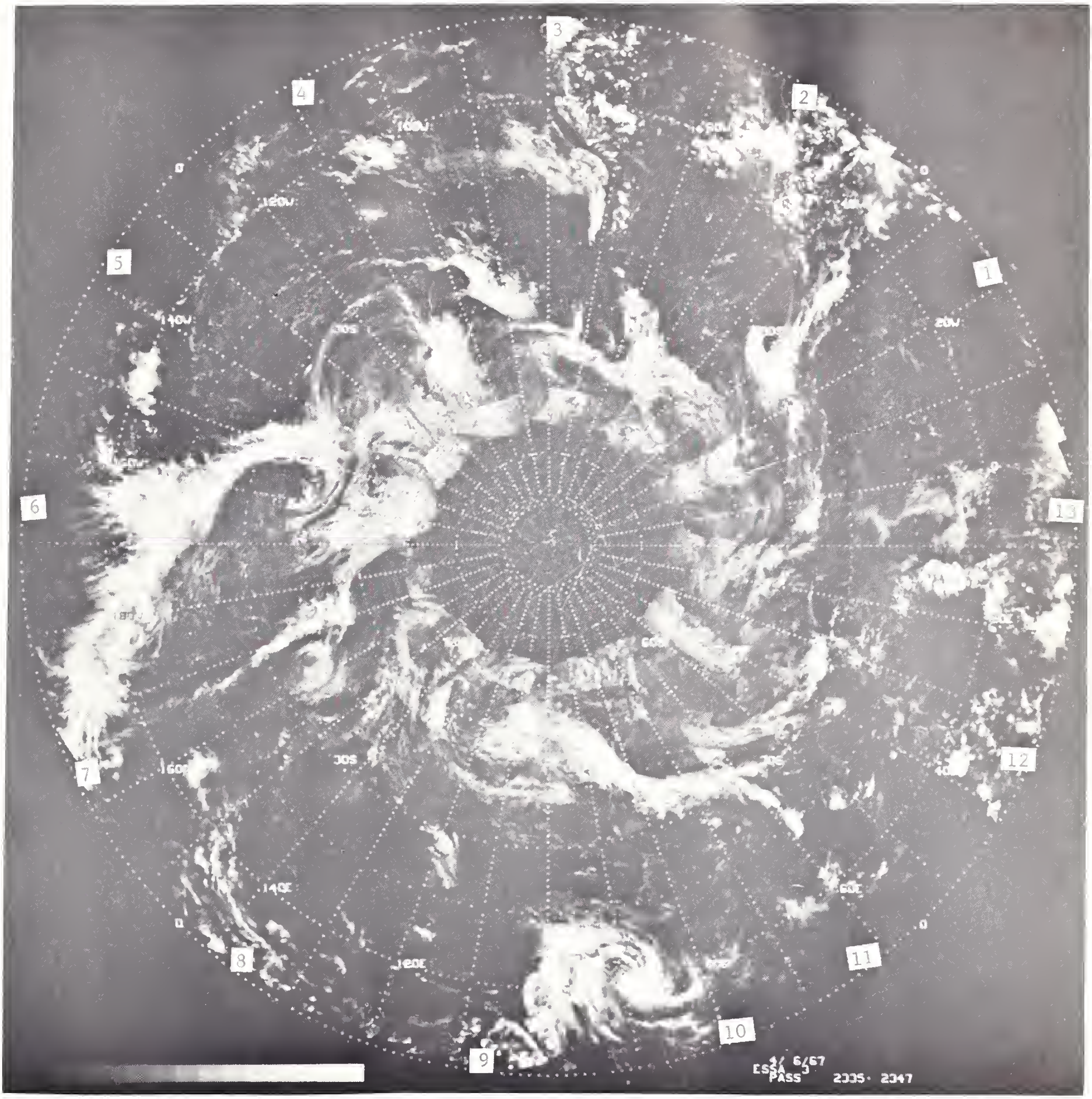
120W
80W
100W
4
2
3
4/ 6/67
ESSA 3
PASS 2335- 2347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160E
30S
30S
40E
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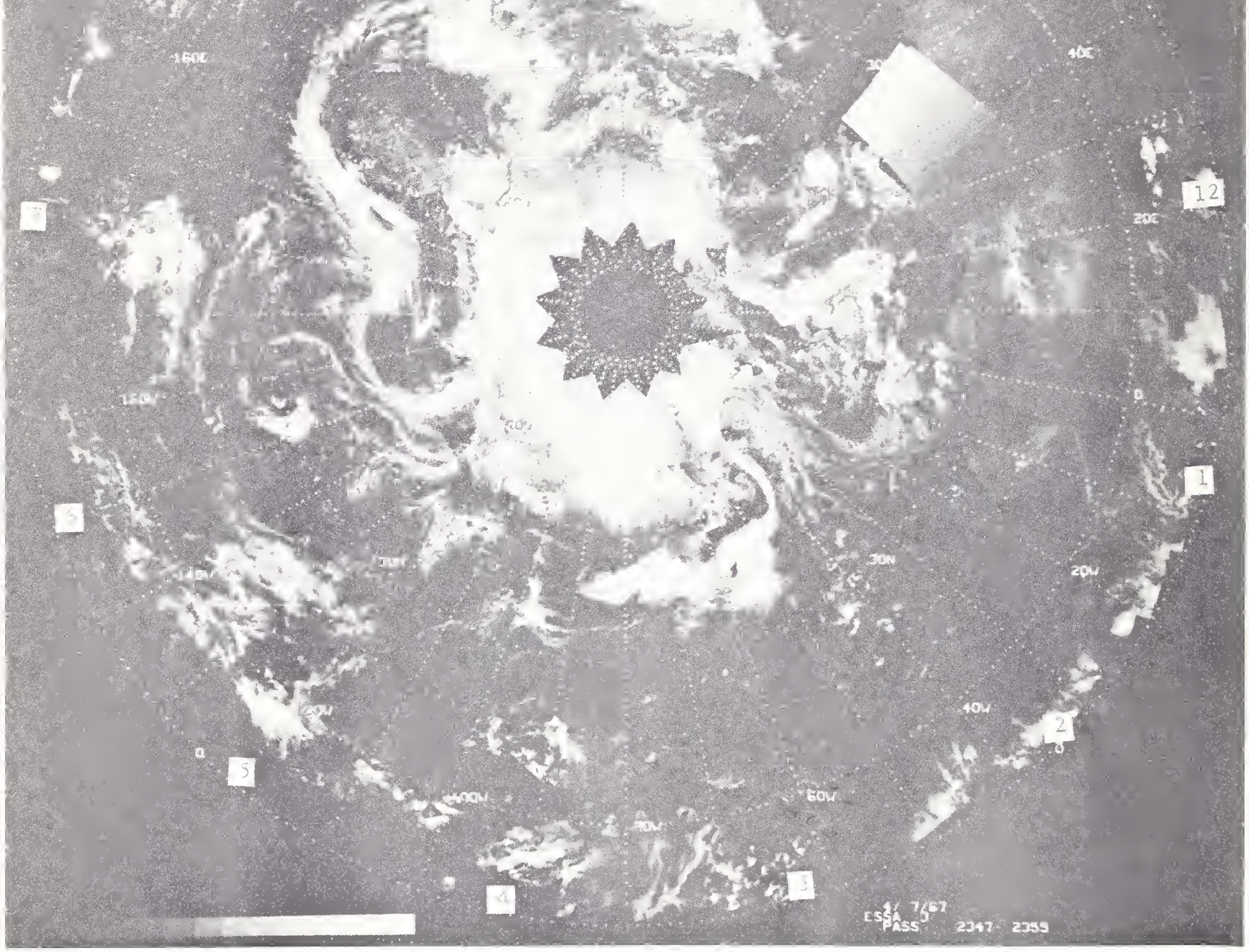
8
11
120E
80E
10
9
4/ 6/67
ESSA 3
PASS
2335 · 2347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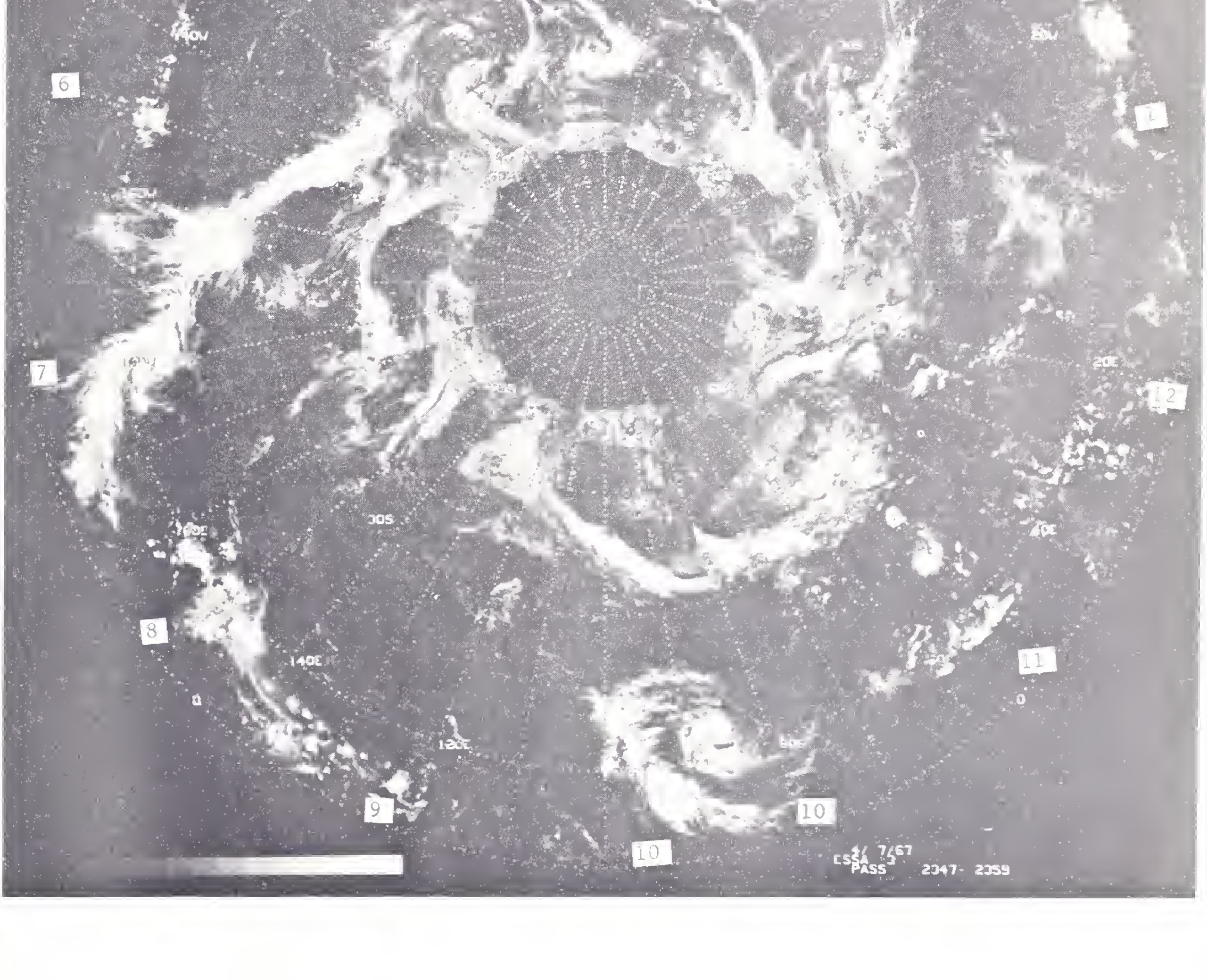
3
4/ 7/67
ESSA 3
PASS 2347 2359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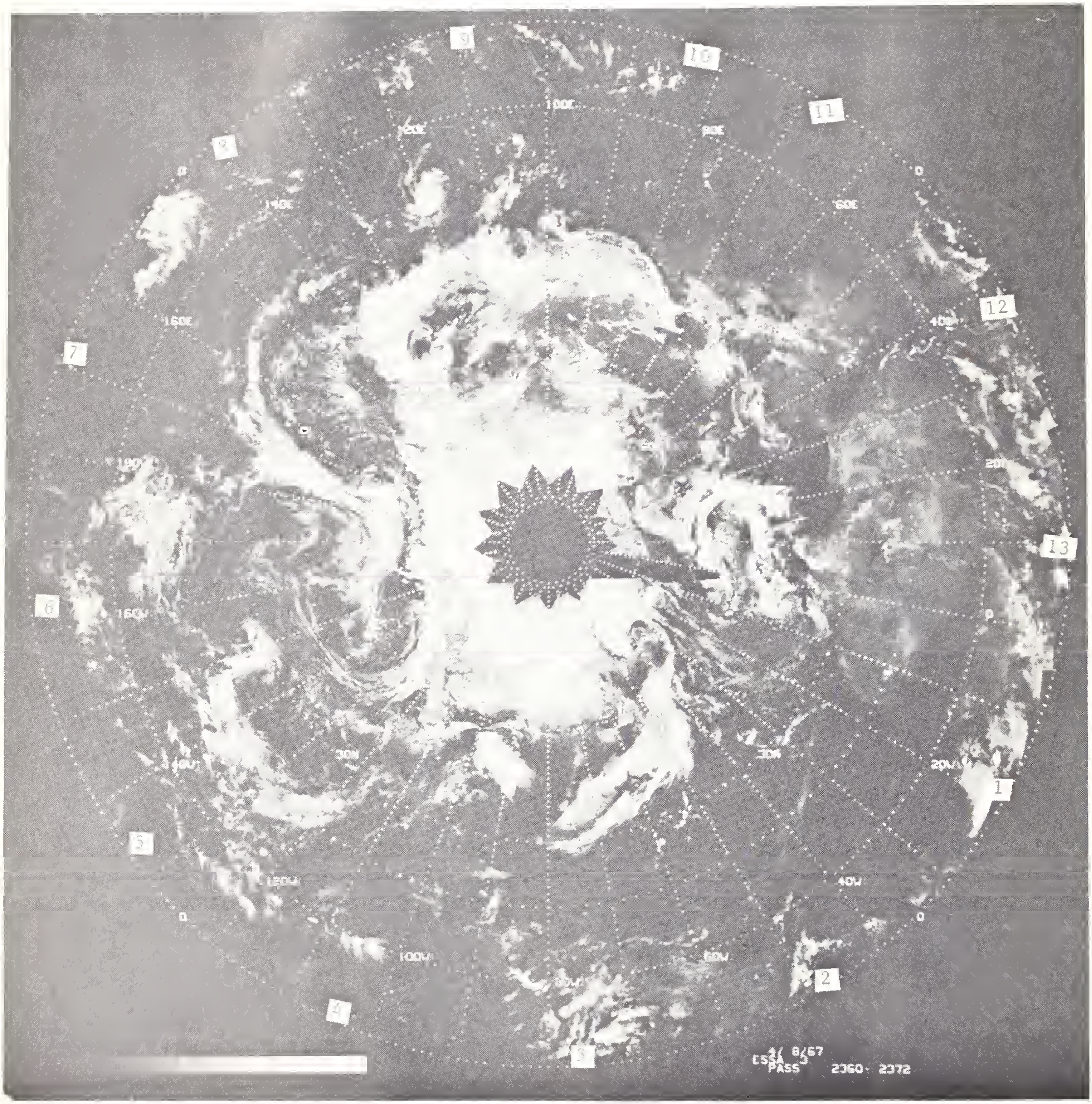
4/ 7/67
ESSA 3
PASS 2347- 2359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160E
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40E
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20E
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160W
6
0
140W
30N
30N
20W
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5
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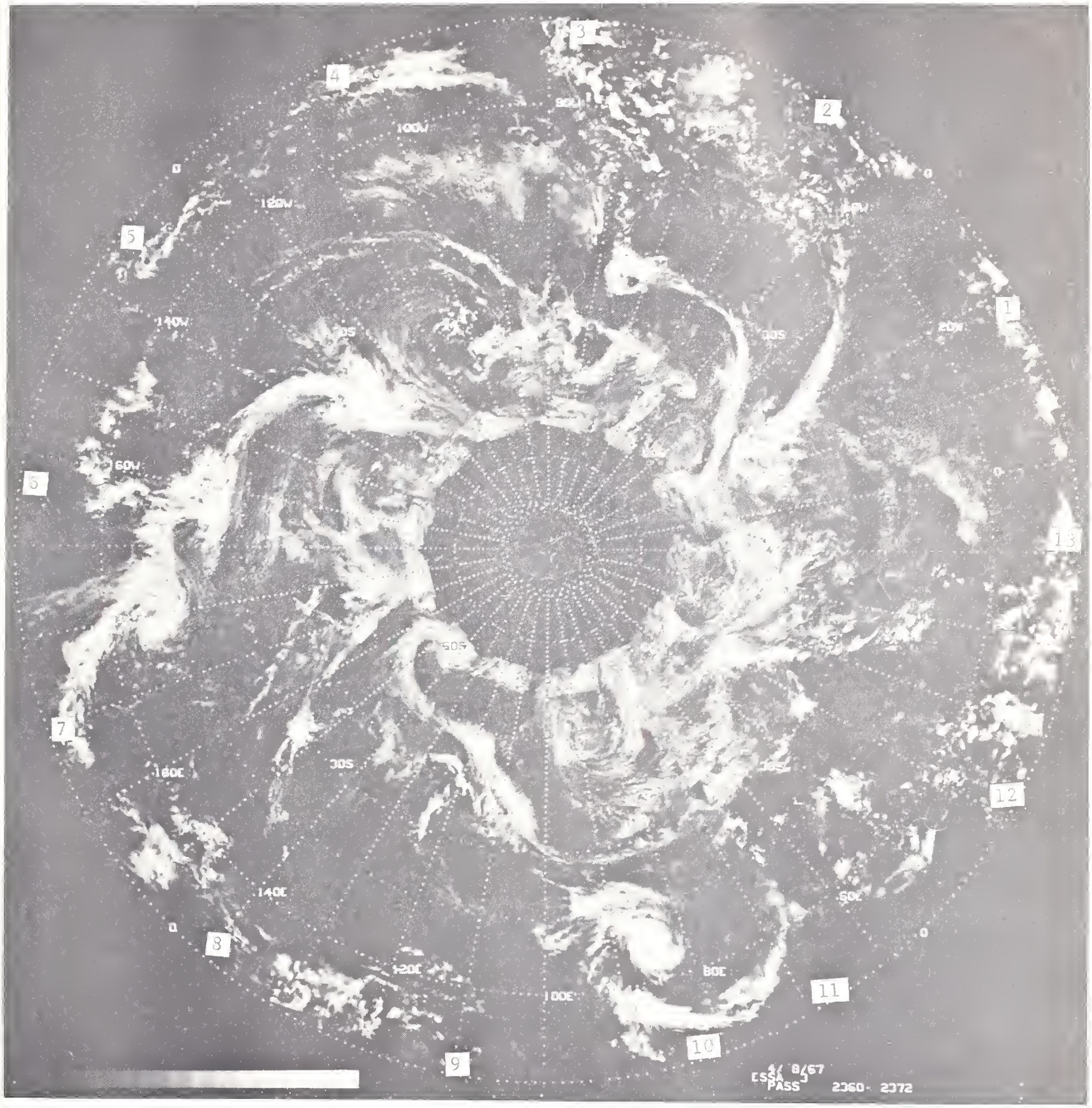
40W
0
100W
60W
2
80W
4
3
4/ 8/67
ESSA 3
PASS 2360- 2372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20W
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6
0
13
50S
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160E
30S
30S
12
140E
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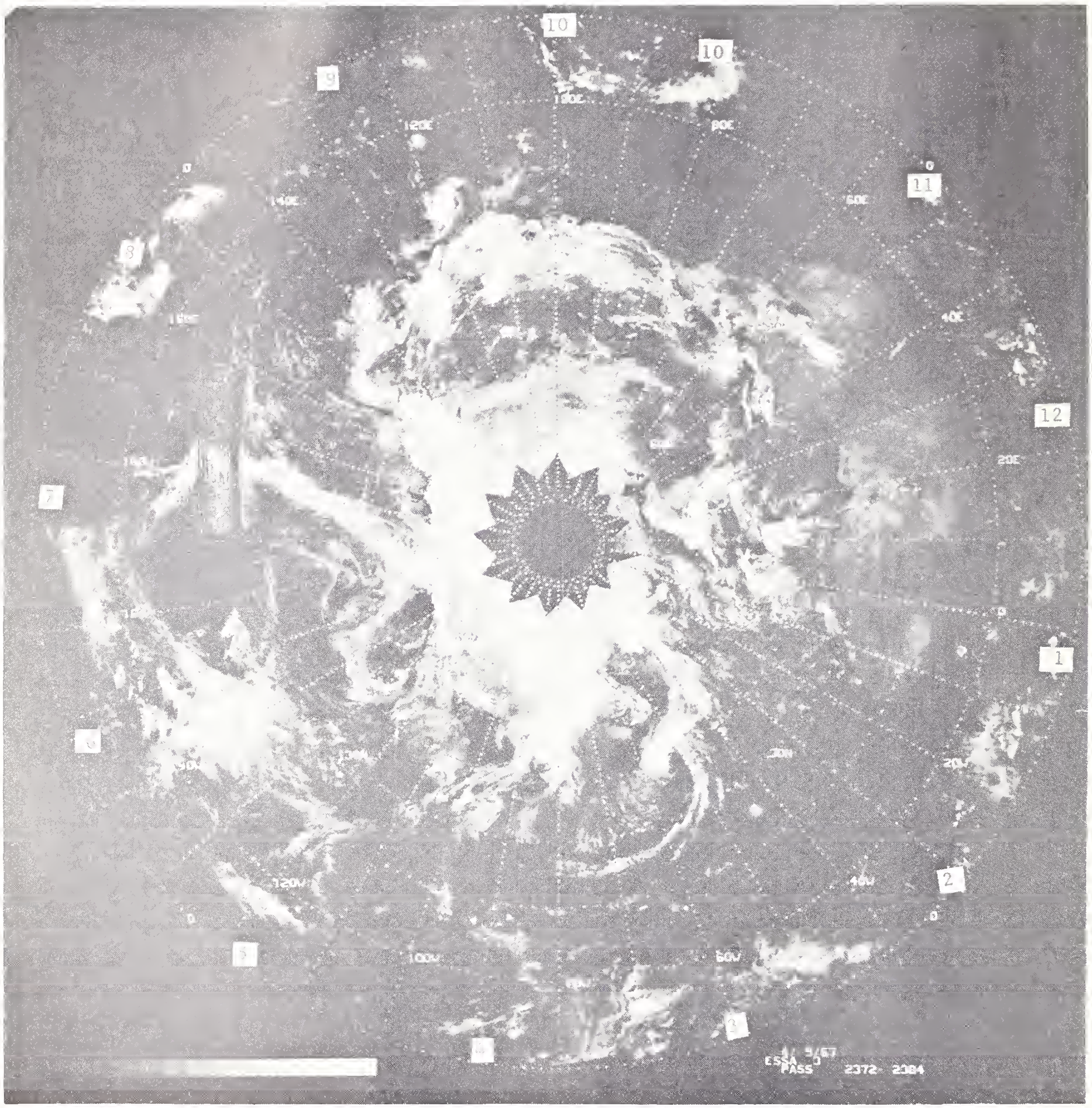
0
8
120E
80E
11
100E
10
9
4/ 8/67
ESSA 3
PASS 2360- 2372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1
6
160W
140W
20W
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100W
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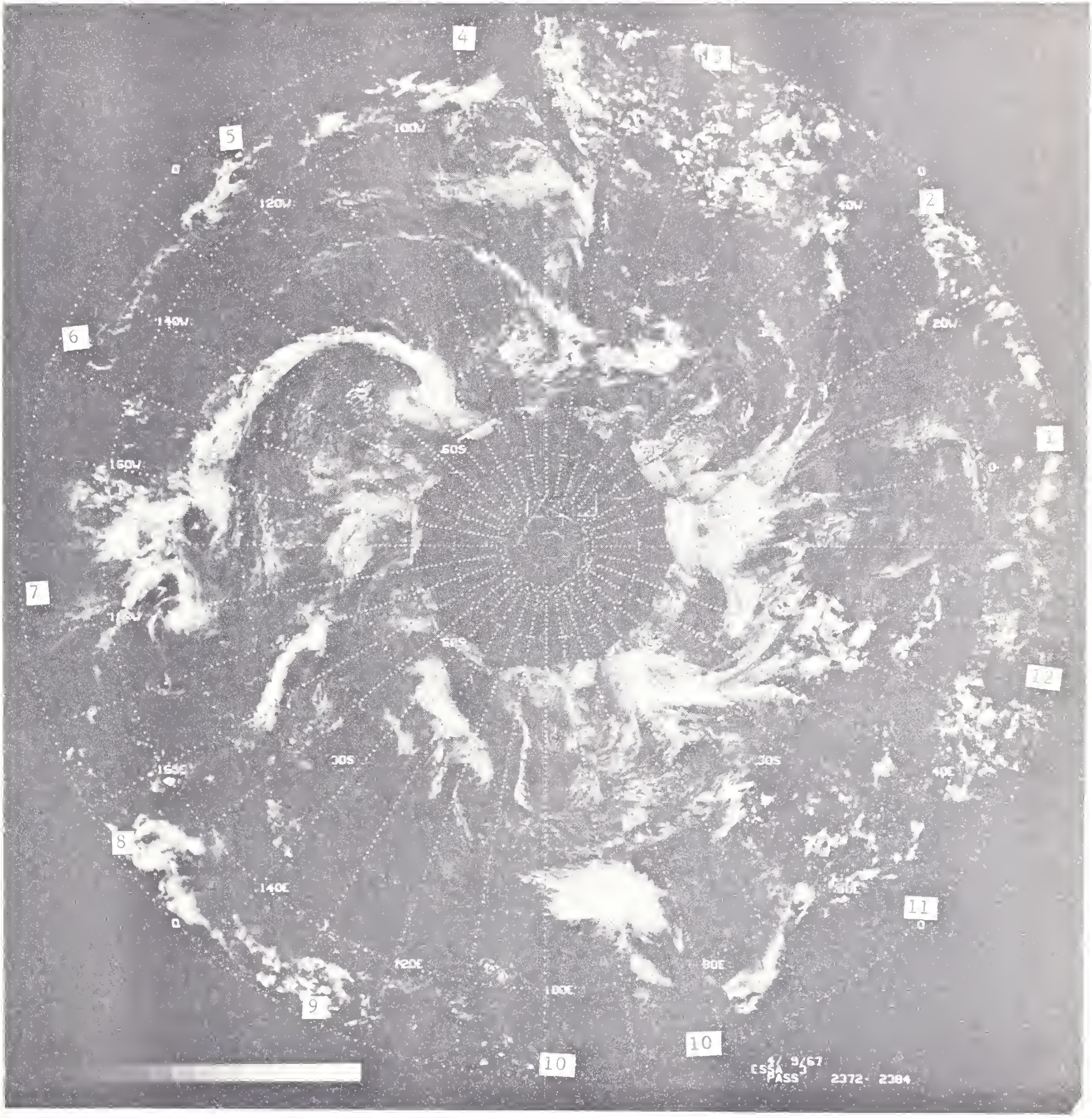
3
4
4/ 5/67
ESSA 3
PASS 2372 2384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13
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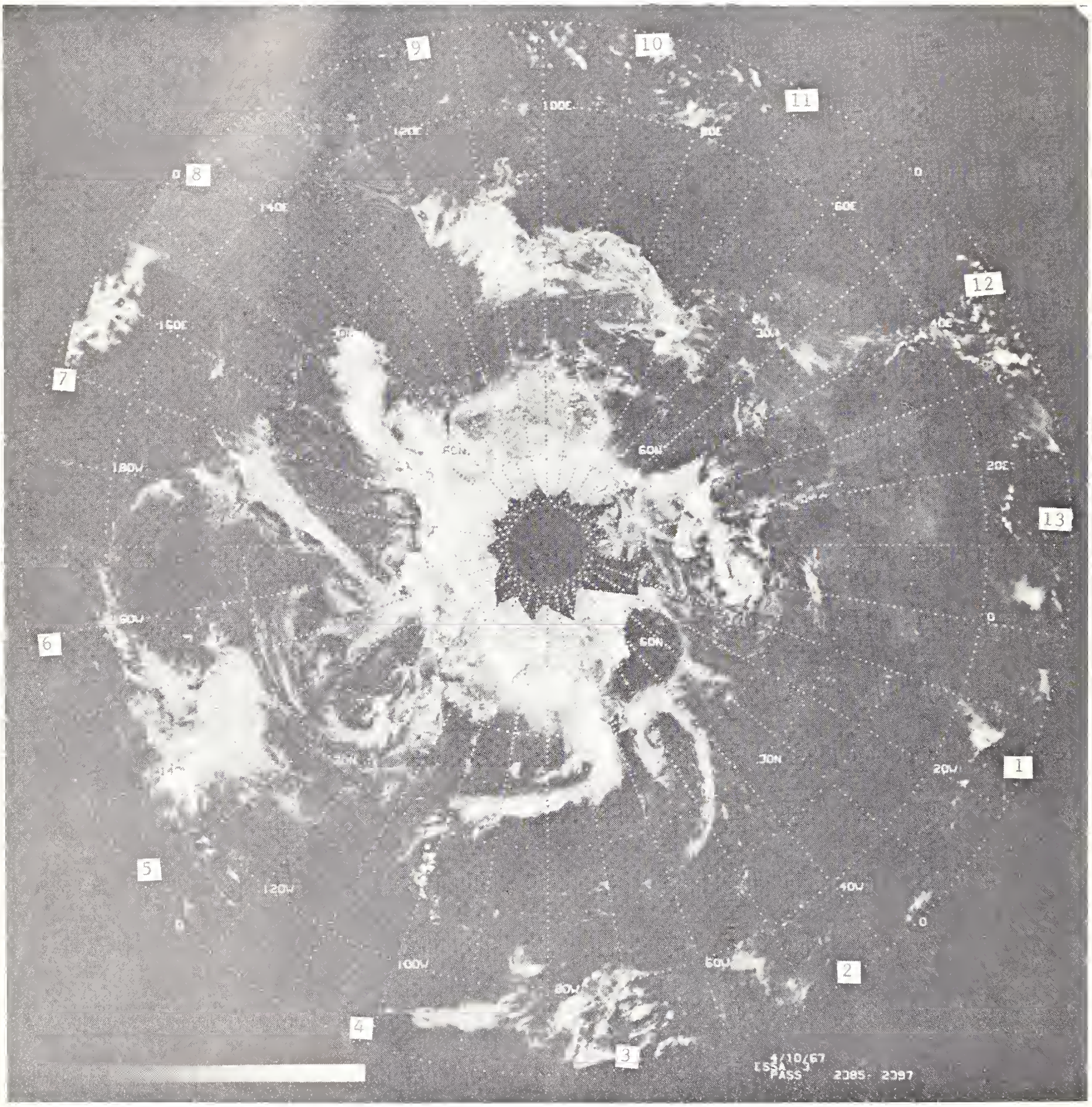
0
120W
40W
2
6
140W
20W
1
160W
60S
0
7
180
12
60S
160E
30S
30S
40E
8
140E
60E
11
0
0
120E
80E
9
100E
10
10
4/ 9/67
ESSA 3
PASS 2372- 2384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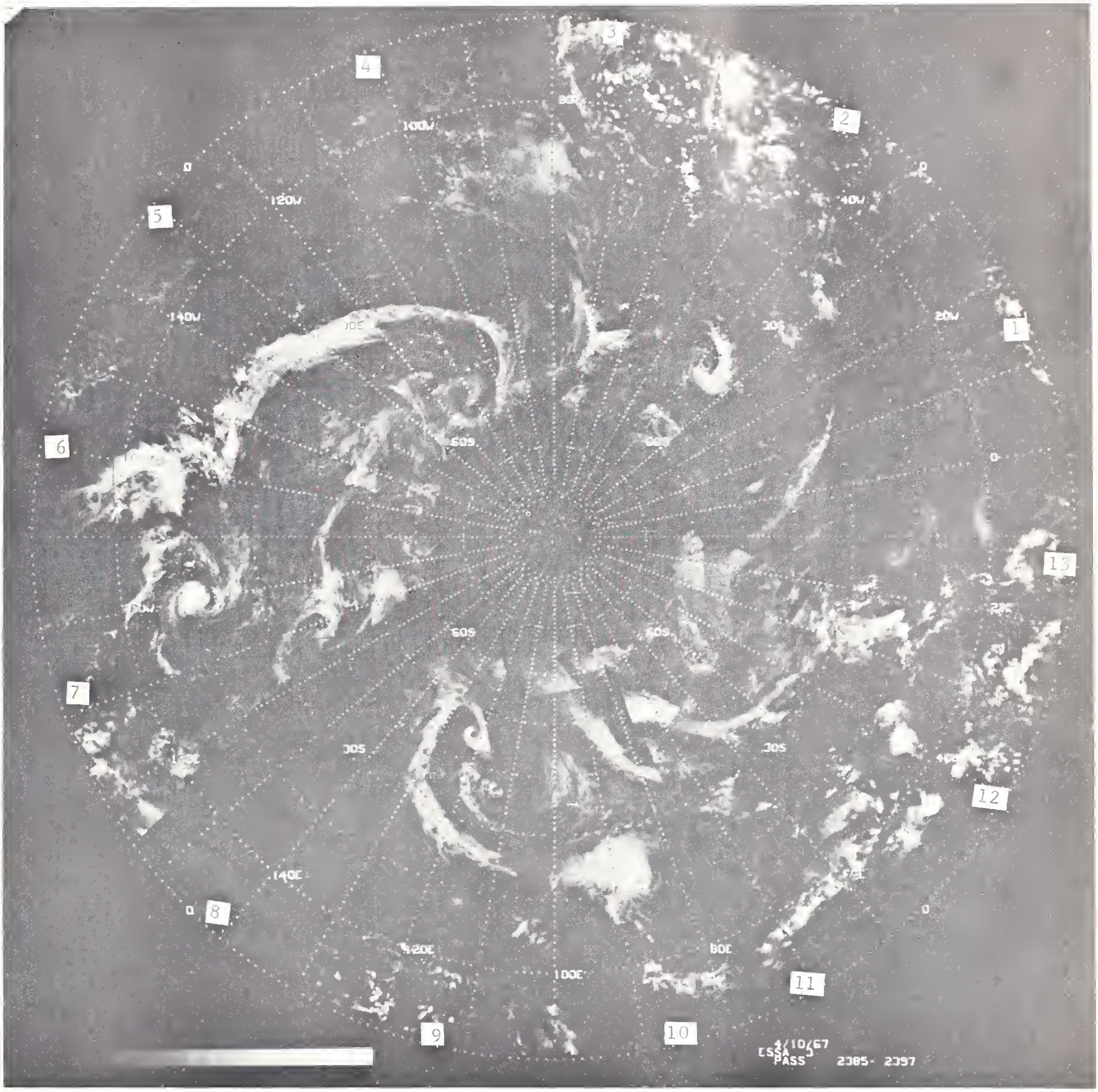
80E
8
140E
60E
12
160E
40E
7
30N
180W
60N
20E
13
80N
160W
0
6
60N
5
30N
20W
1
120W
40W
100W
60W
2
80W
4
3
4/10/67
ESSA 3
PASS 2385- 2397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3
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8
9
10
11
12
13
100W
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160W
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40W
20W
0
20E
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60E
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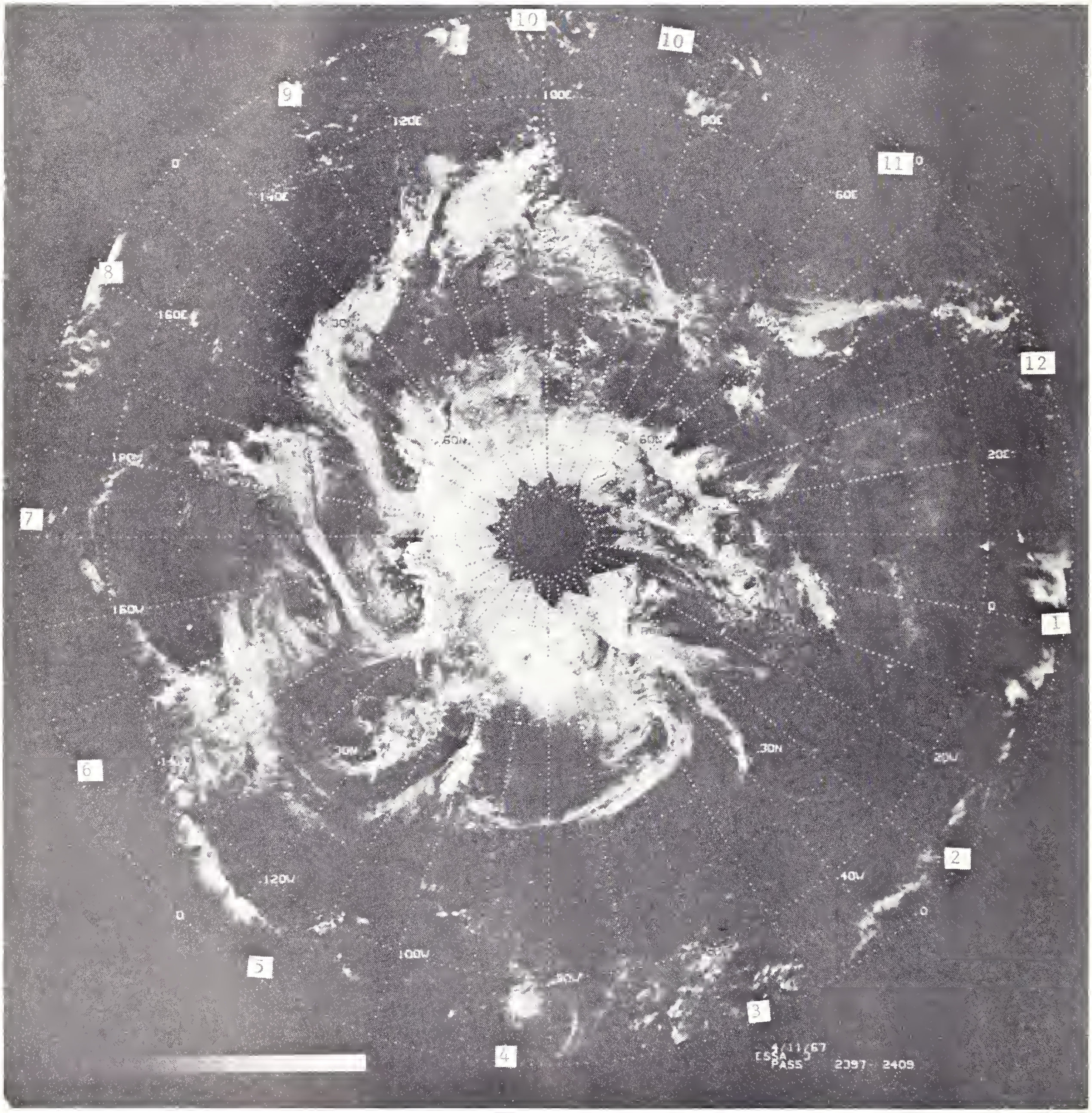
100E
120E
140E
160E
30S
60S
4/10/67
ESSA 3
PASS 2385-2397



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10
9
100E
120E
80E
11
60E
0
140E
8
160E
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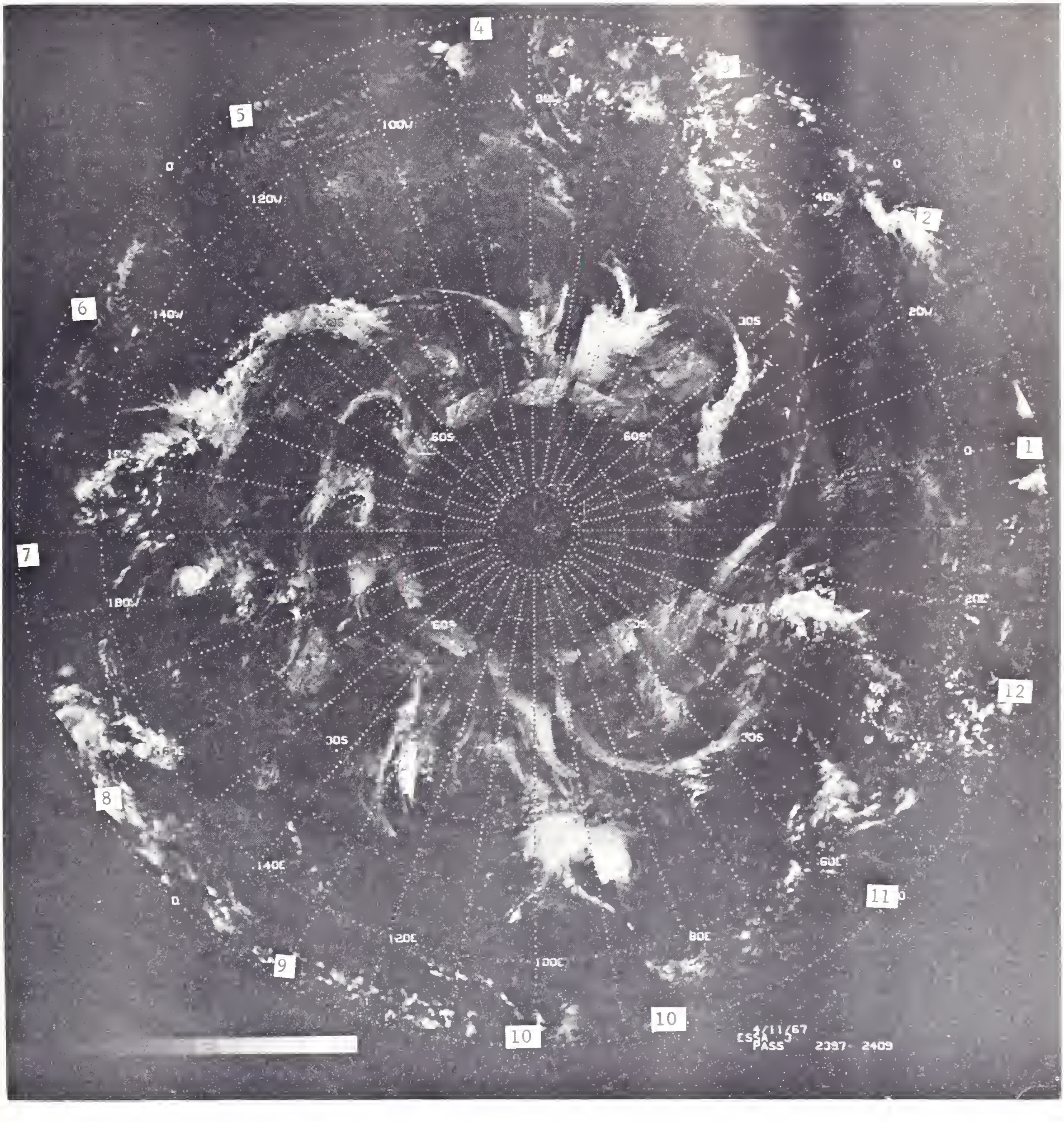
60N
60N
180W
20E
7
0
1
160W
6
30N
30N
20W
140W
2
120W
40W
0
0
5
100W
80W
3
4
4/11/67
ESSA 5
PASS 2397- 2409
12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160E
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60E
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120E
80E
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100E
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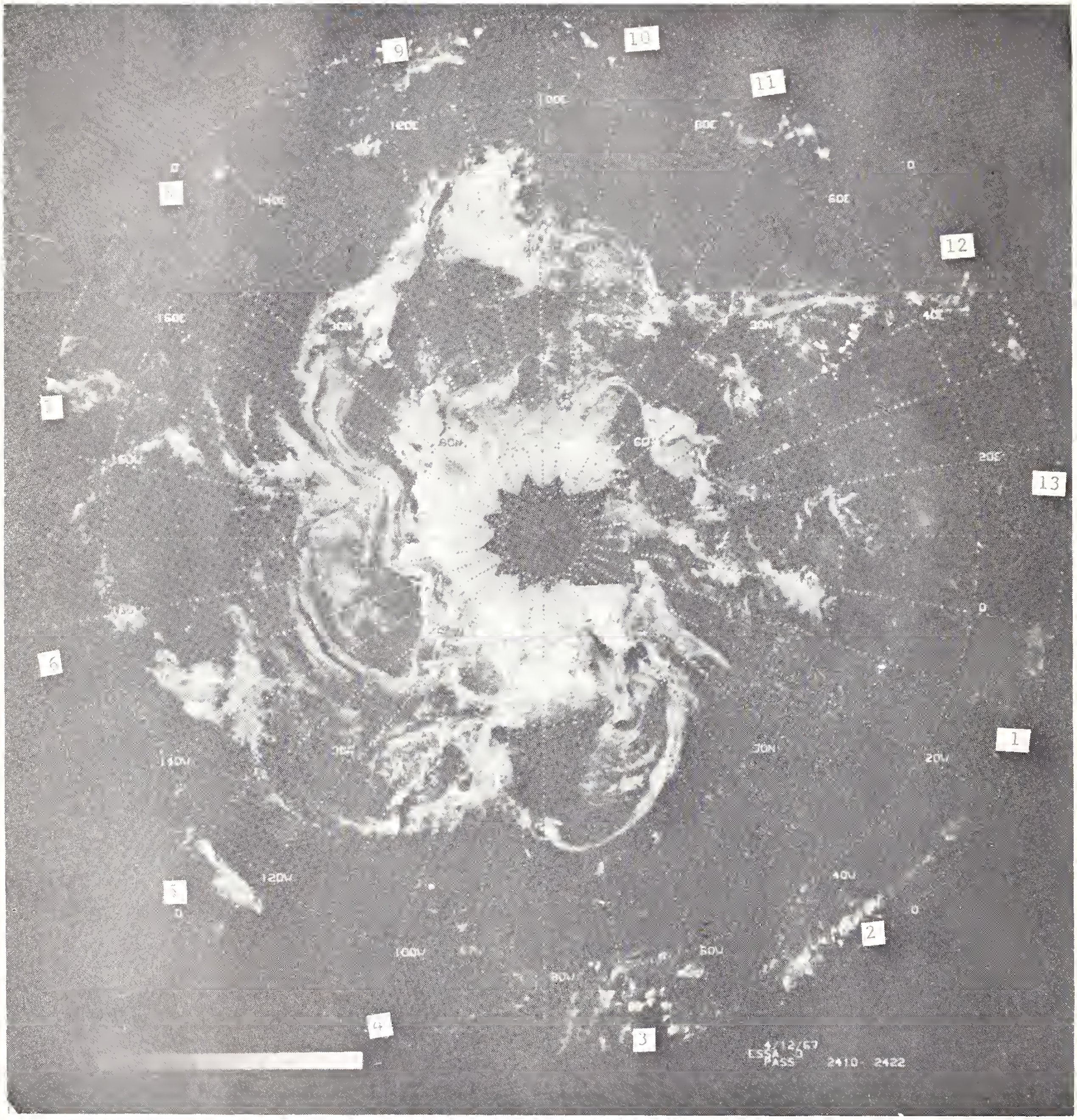
4/11/67
ESSA 3
PASS 2397 2409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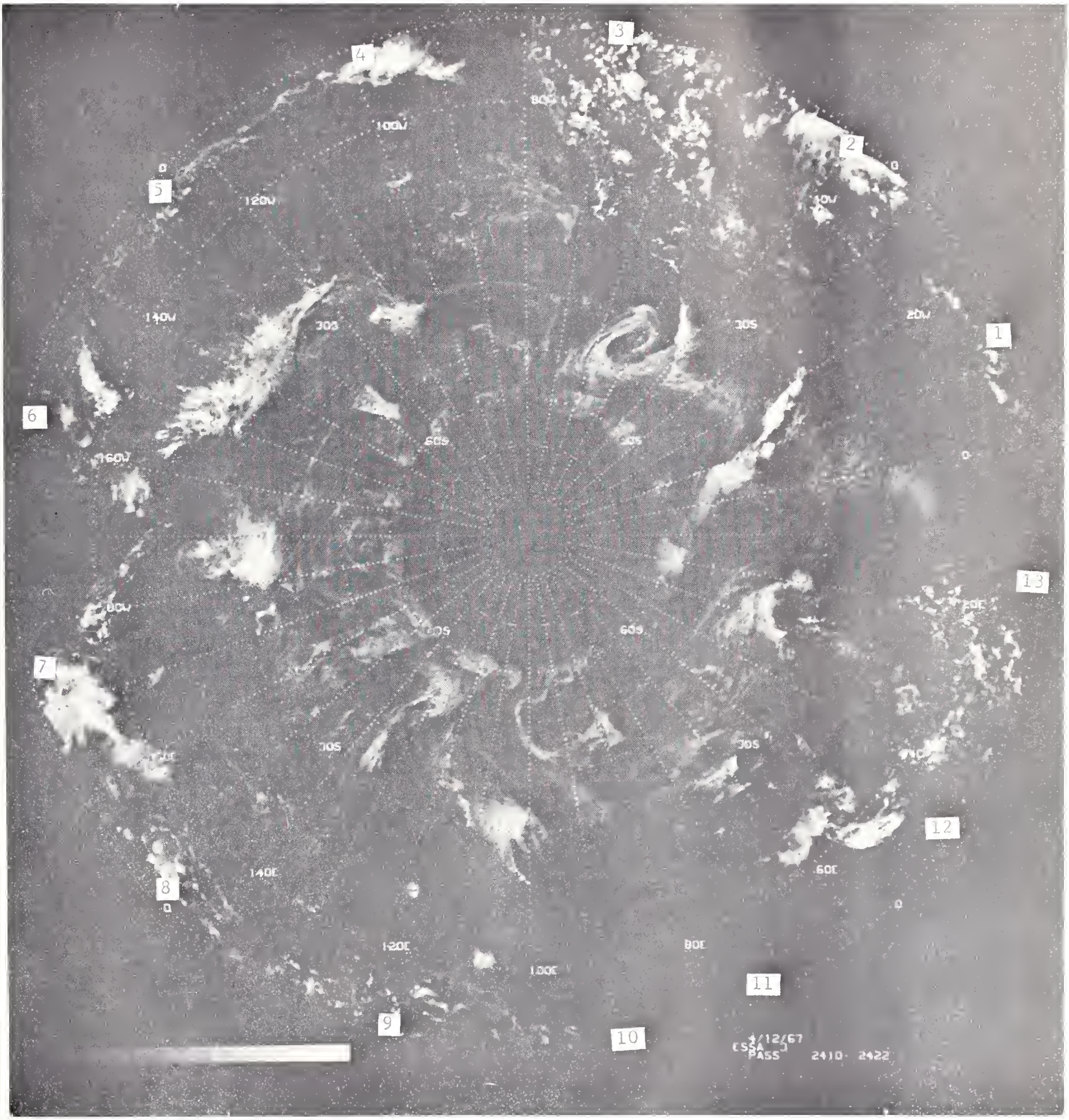
4/12/67
ESSA 3
PASS 2410 - 2422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100E
80E
60E
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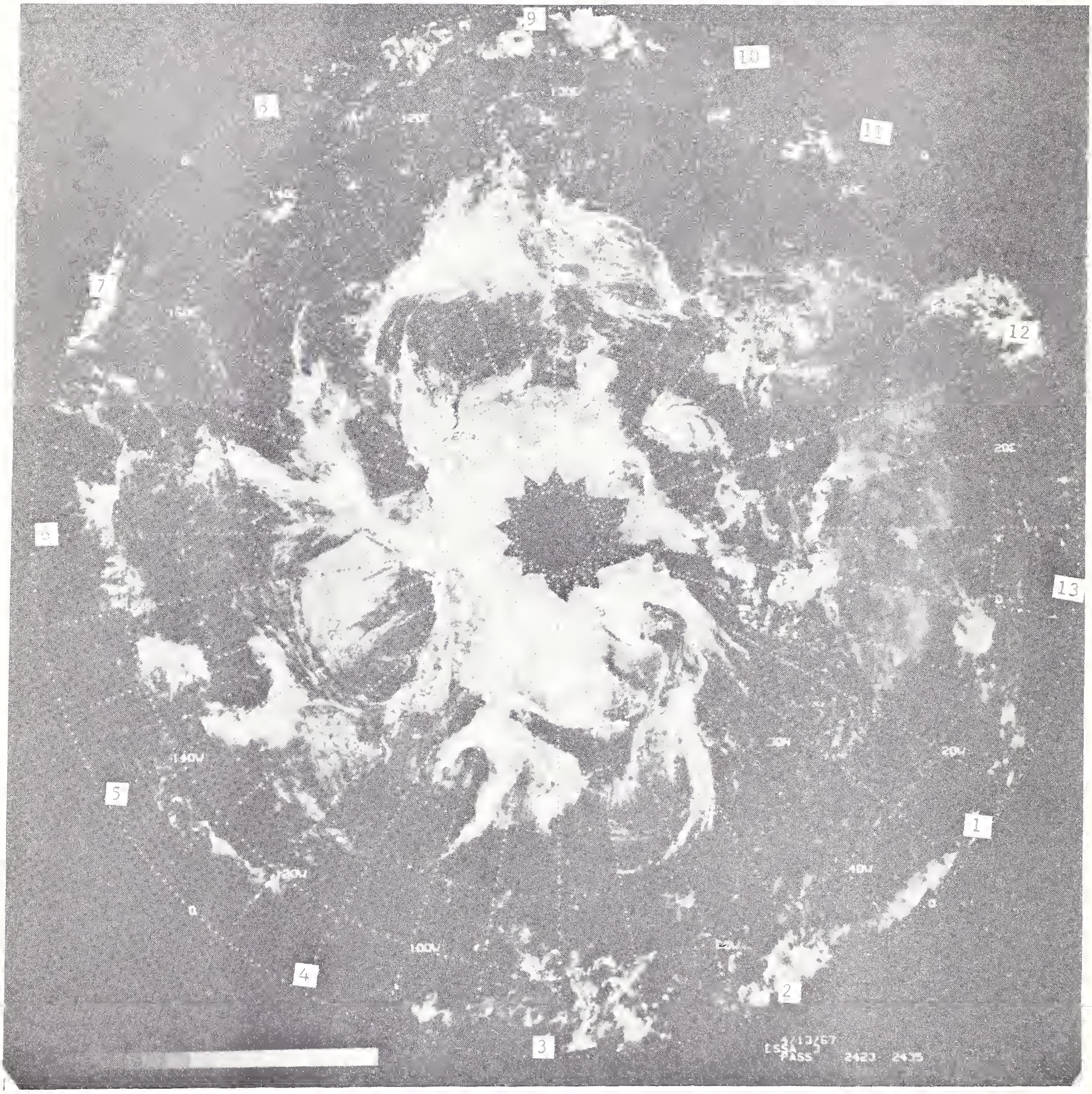
60S
4/12/67
ESSA 3
PASS 2410- 2422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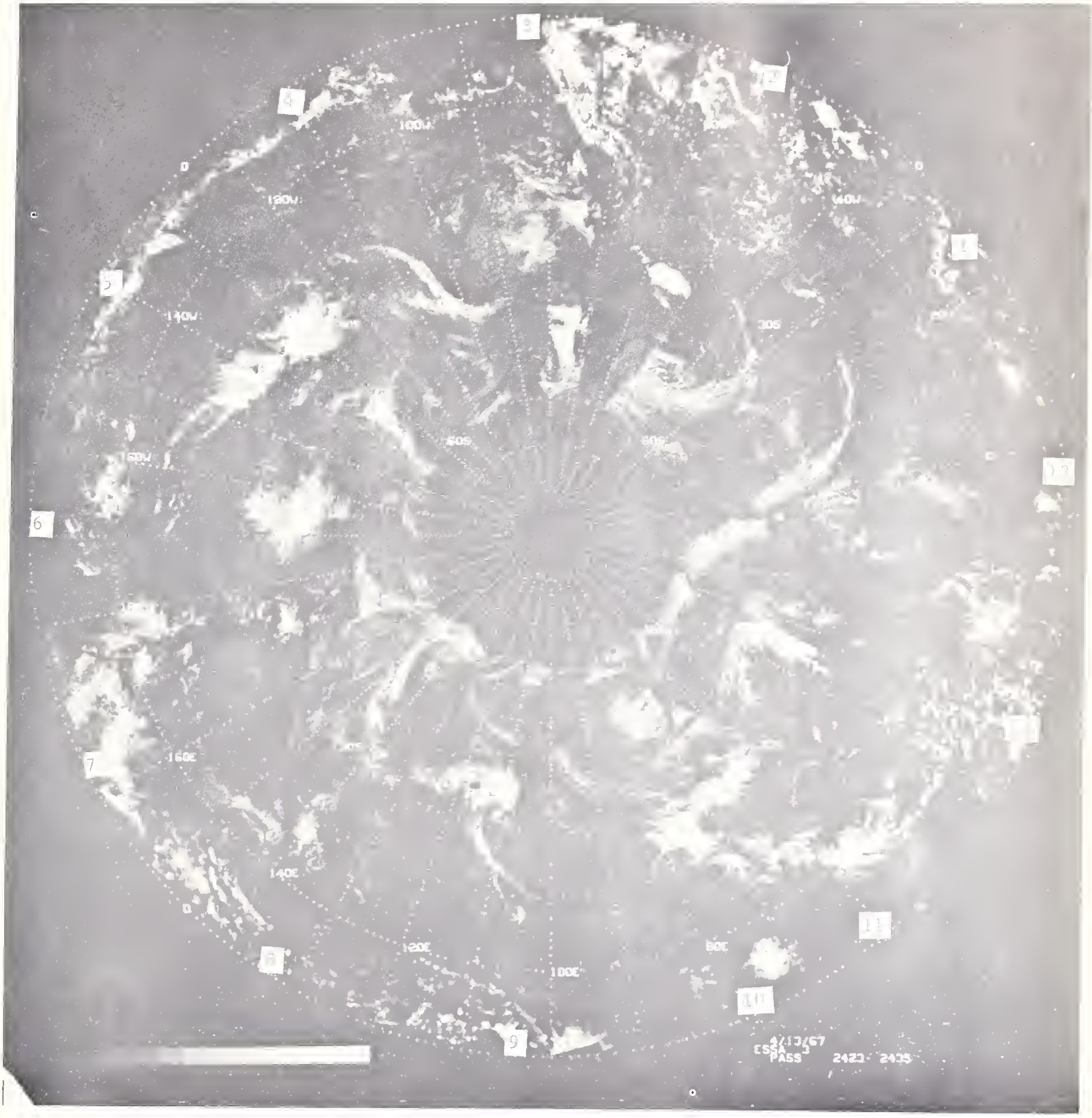
4/13/67
ESSA 3
PASS 2423 2435



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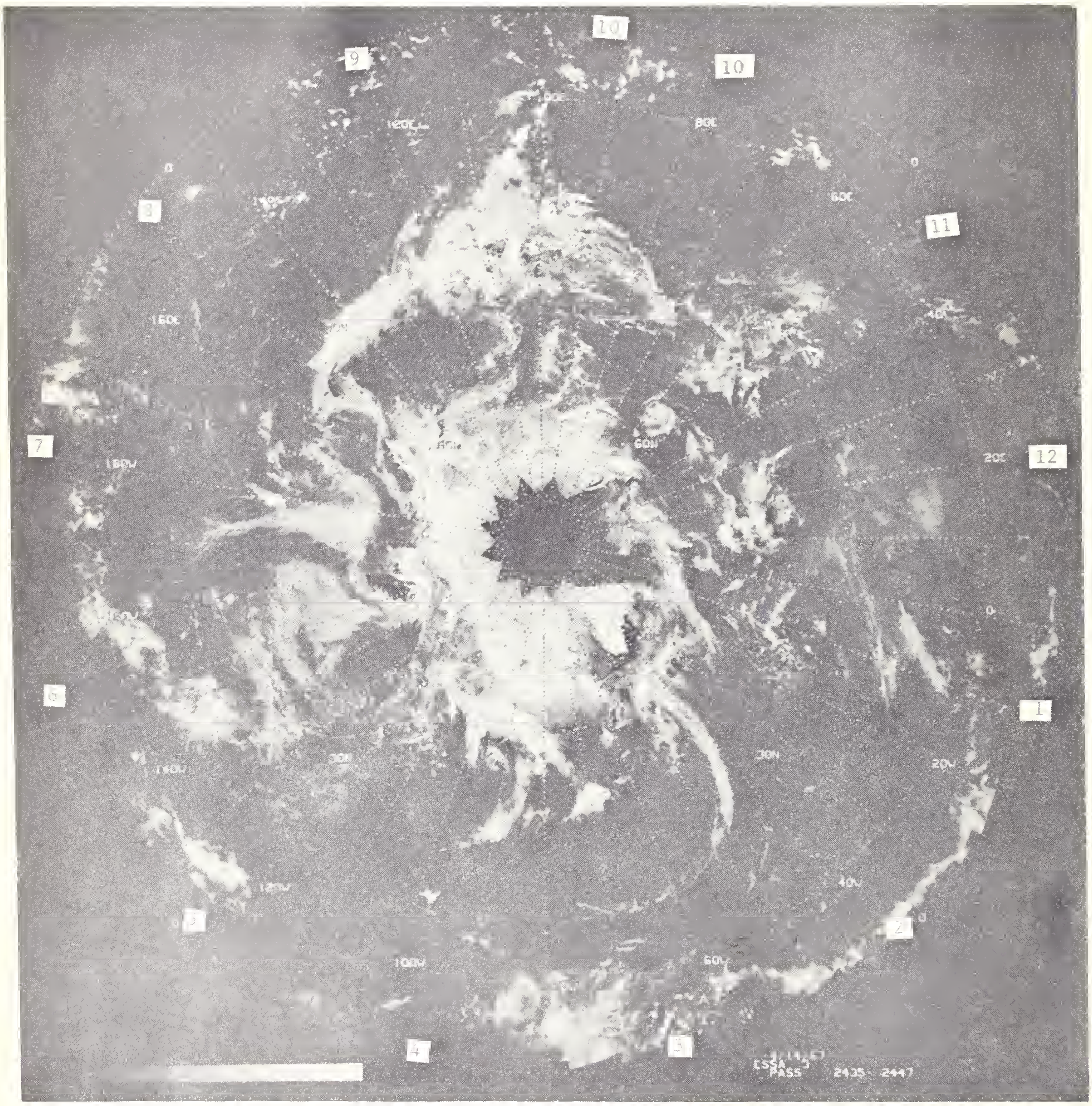
4/13/67
ESSA 3
PASS 2423 2435

10
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60W
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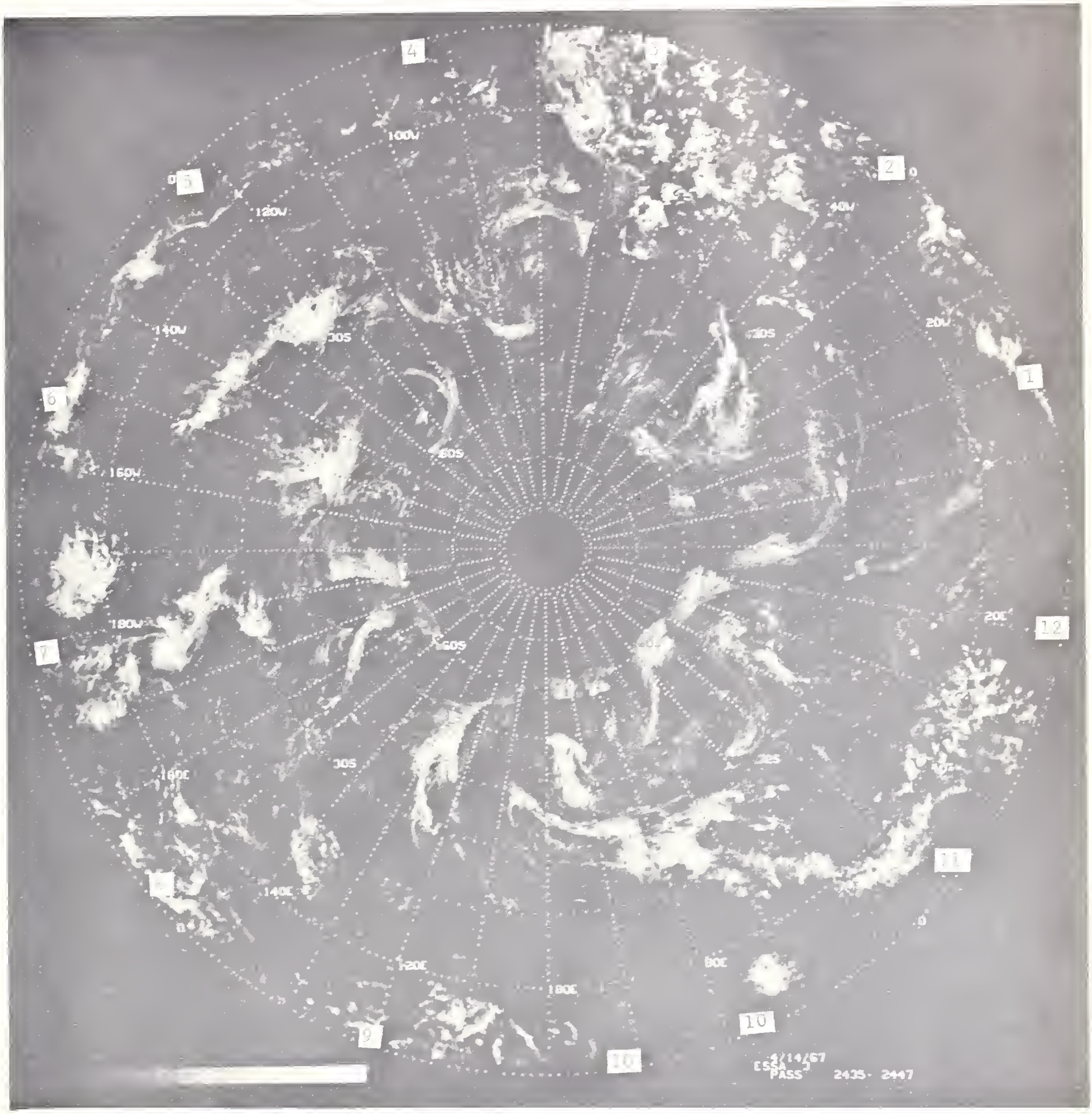
ESSA 3
PASS 2435 - 2447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160E
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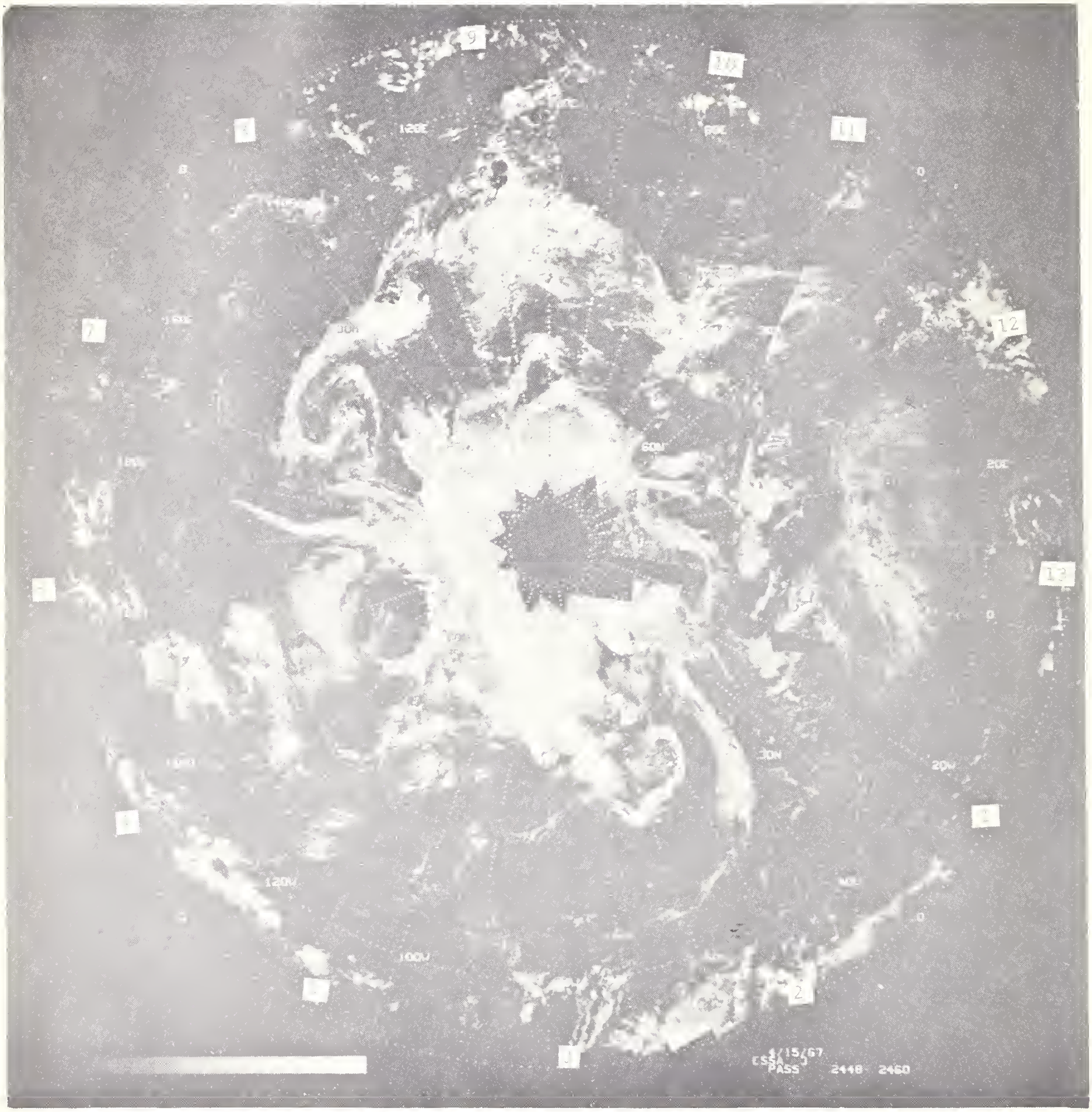
4/14/67
ESSA 3
PASS 2435- 2447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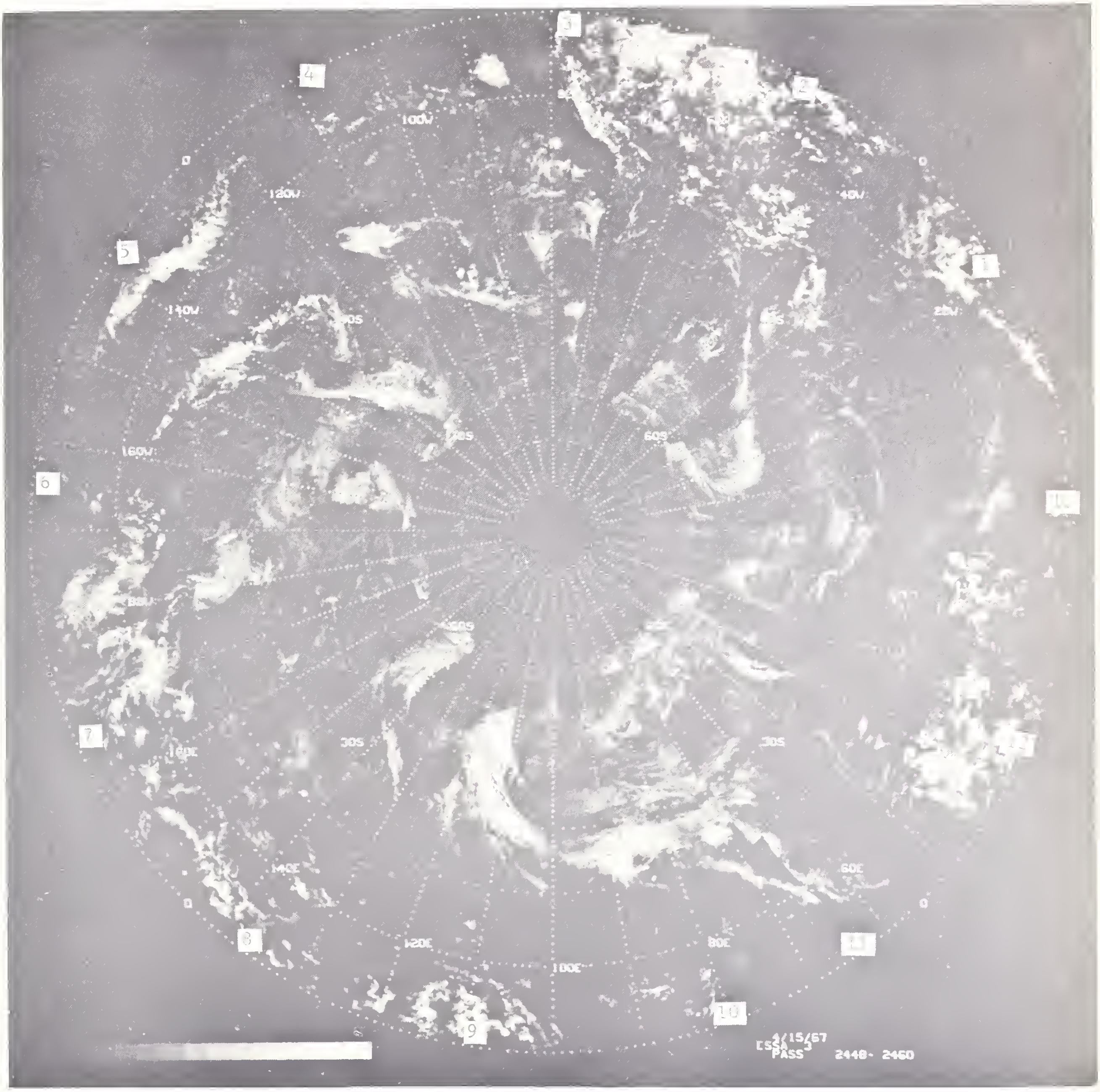
4/15/67
ESSA 3
PASS 2448 2460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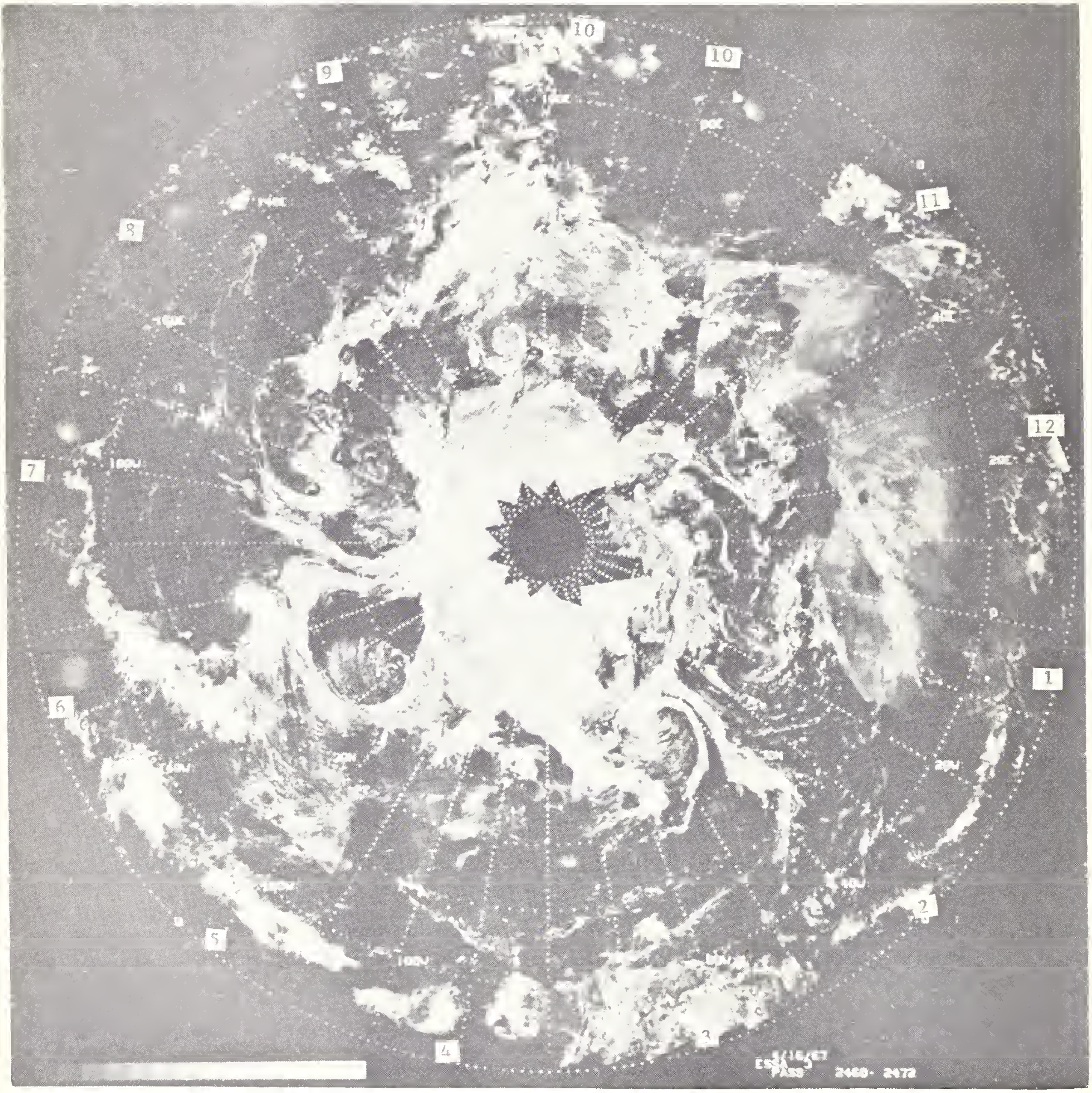
4/15/67
ESSA 3
PASS 2448- 2460



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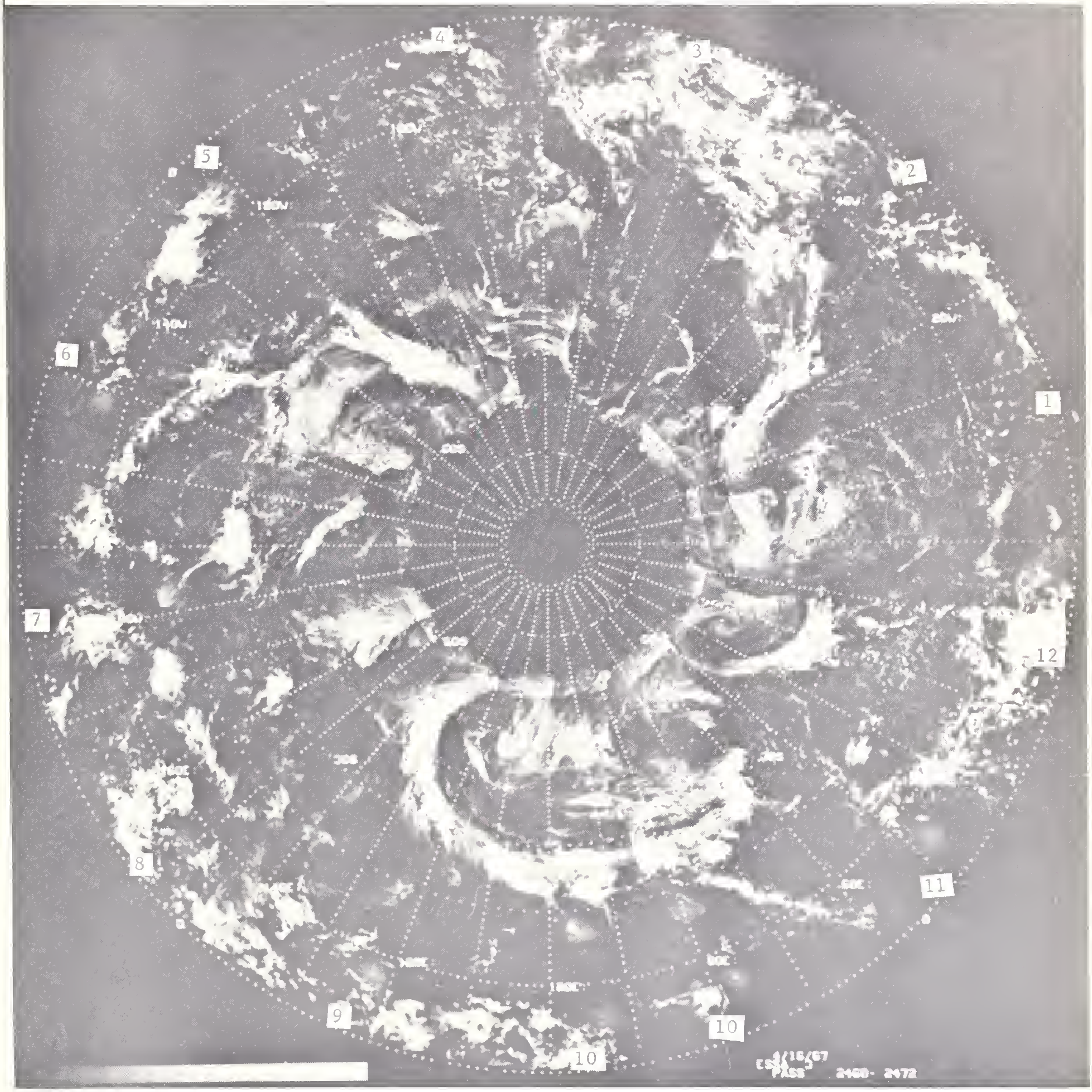
1/16/67
ESSA 3
PASS 2460- 2472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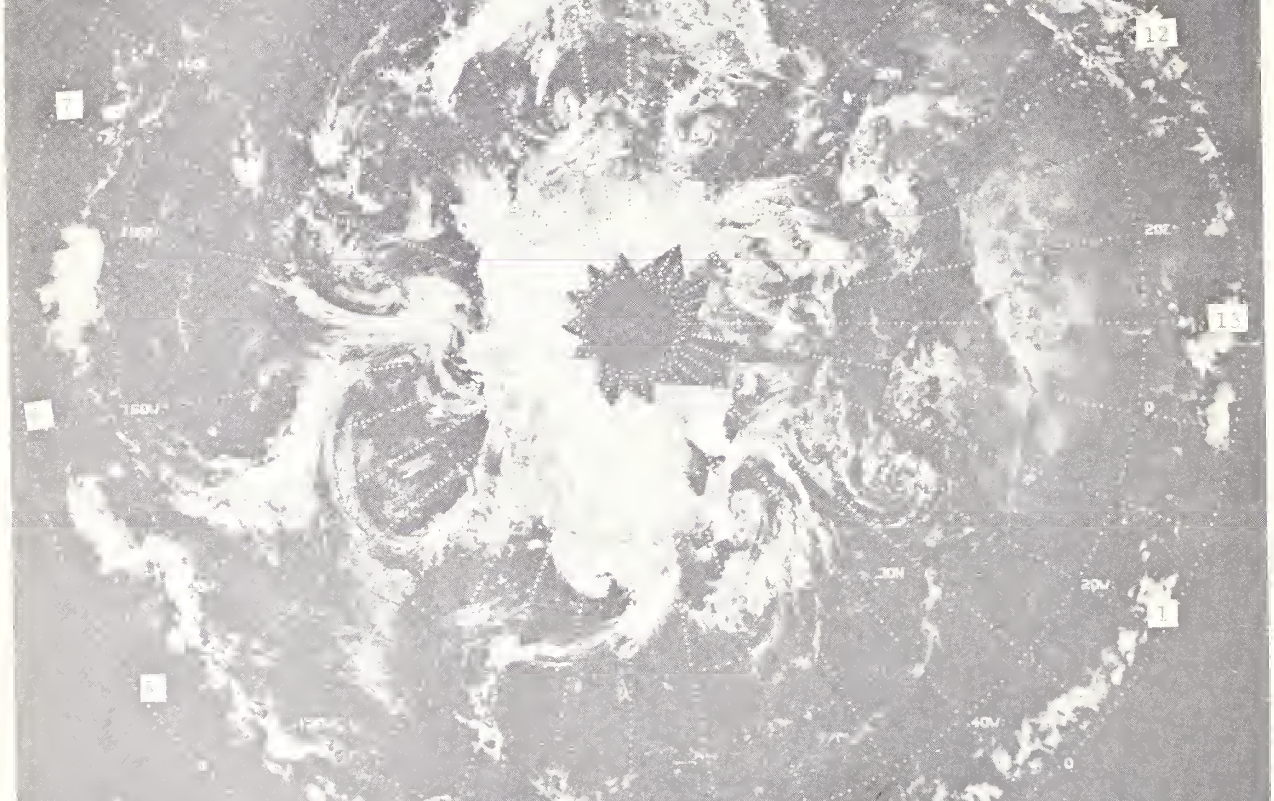
4/16/67
ESSA 3
PASS 2460- 2472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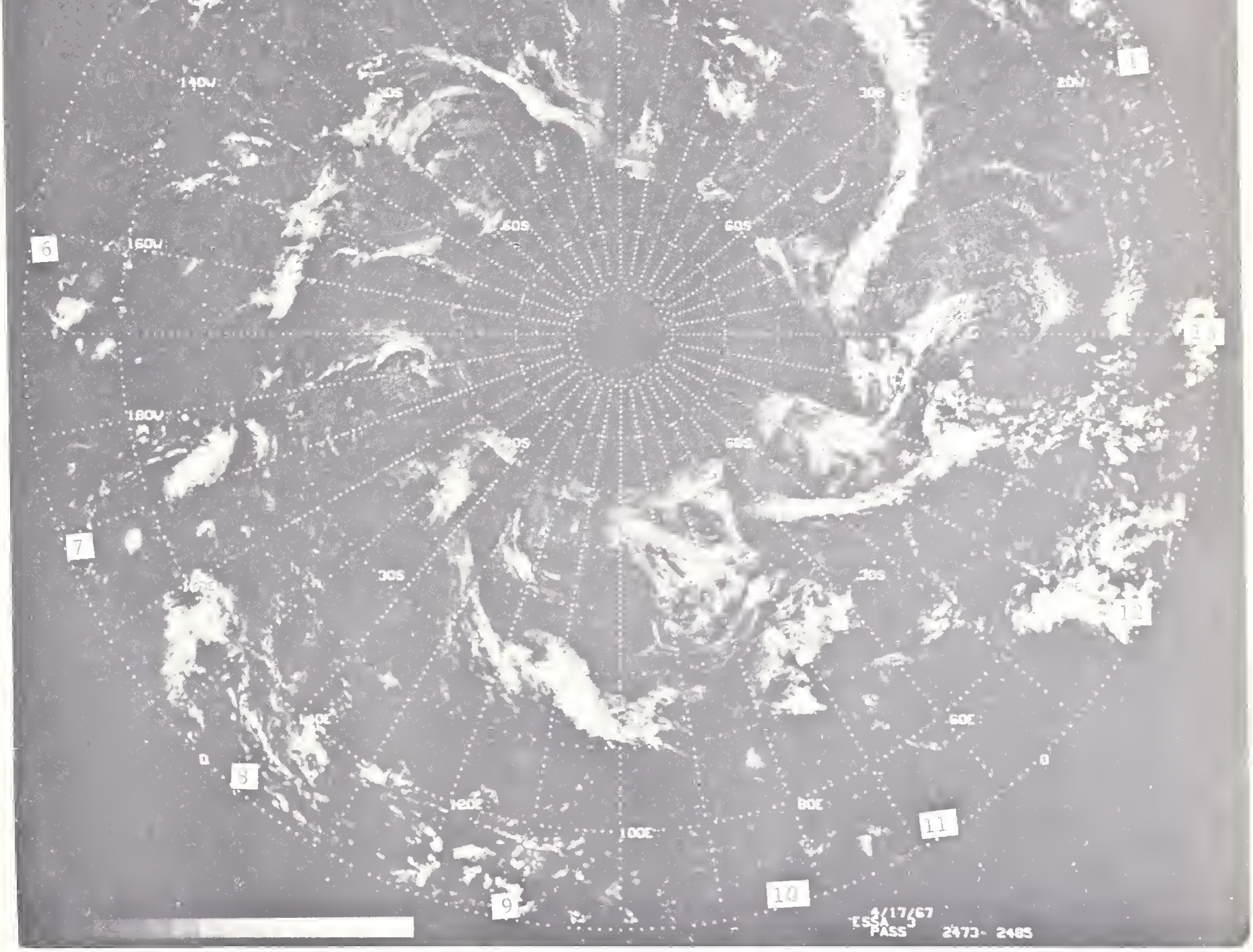
3/17/67
ESSA 3
PASS 2473- 2485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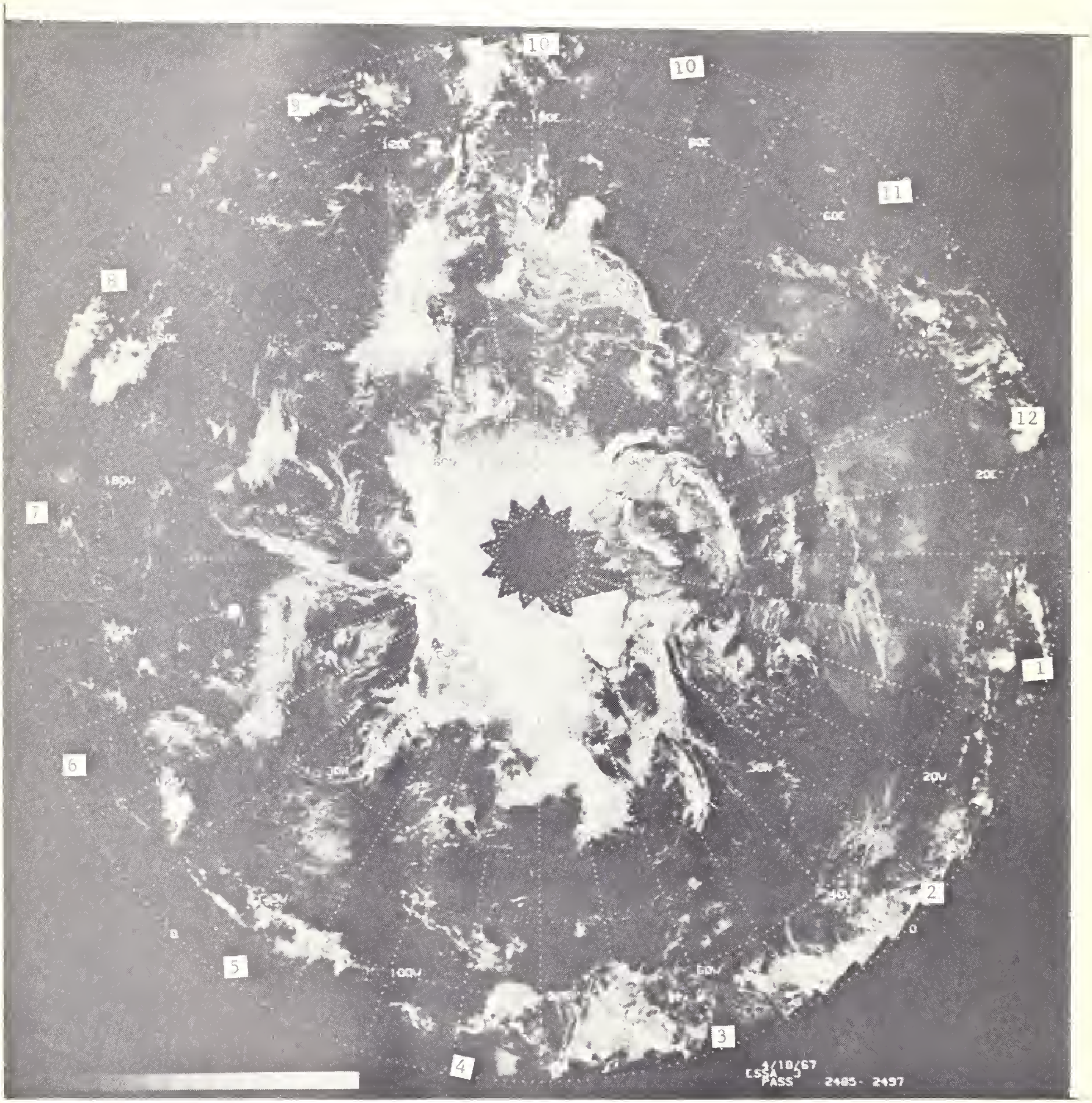
4/17/67
ESSA 3
PASS 2473- 2485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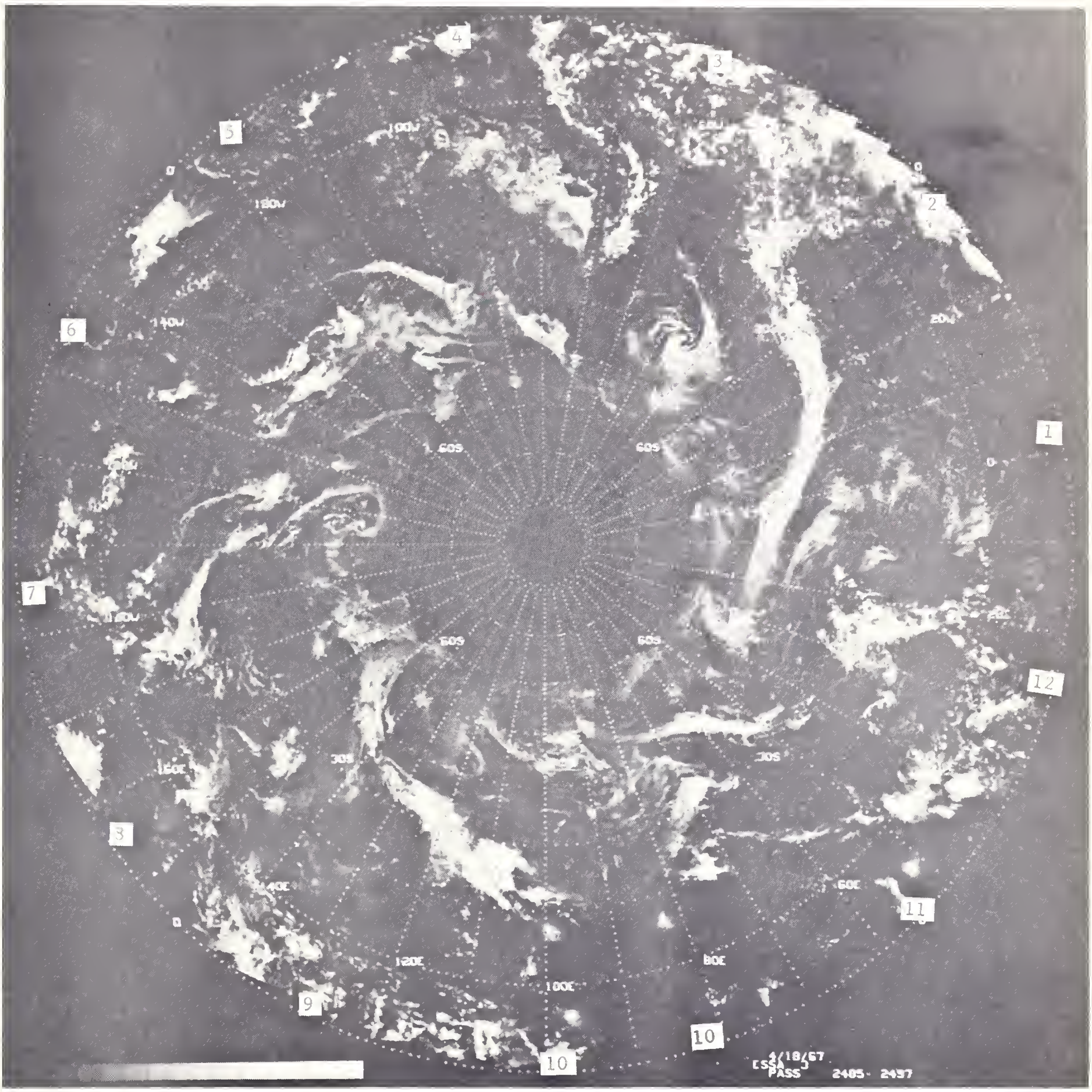
4/18/67
ESSA 3
PASS 2485 - 2497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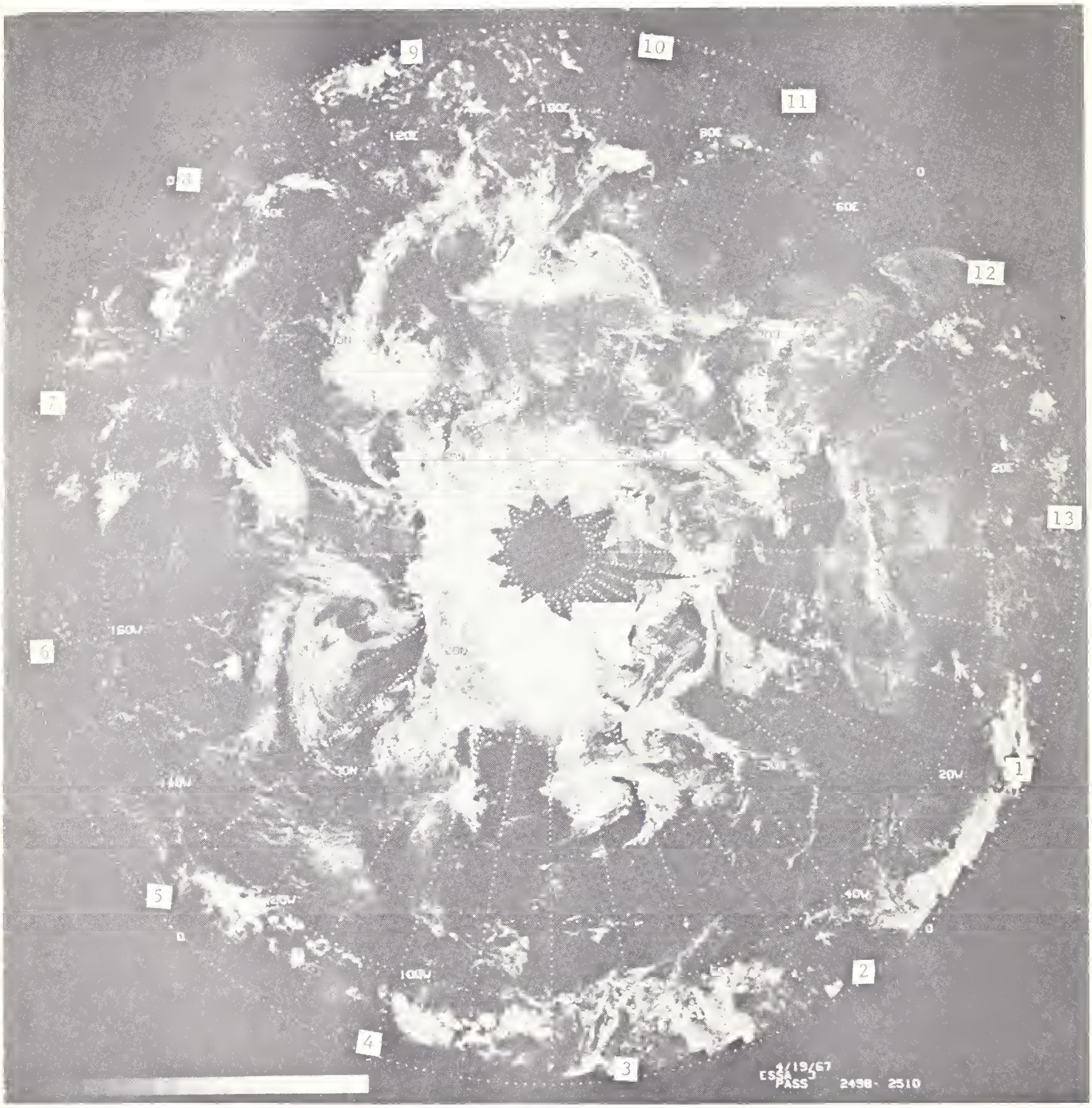
4/18/67
ESSA
PASS 2405- 2437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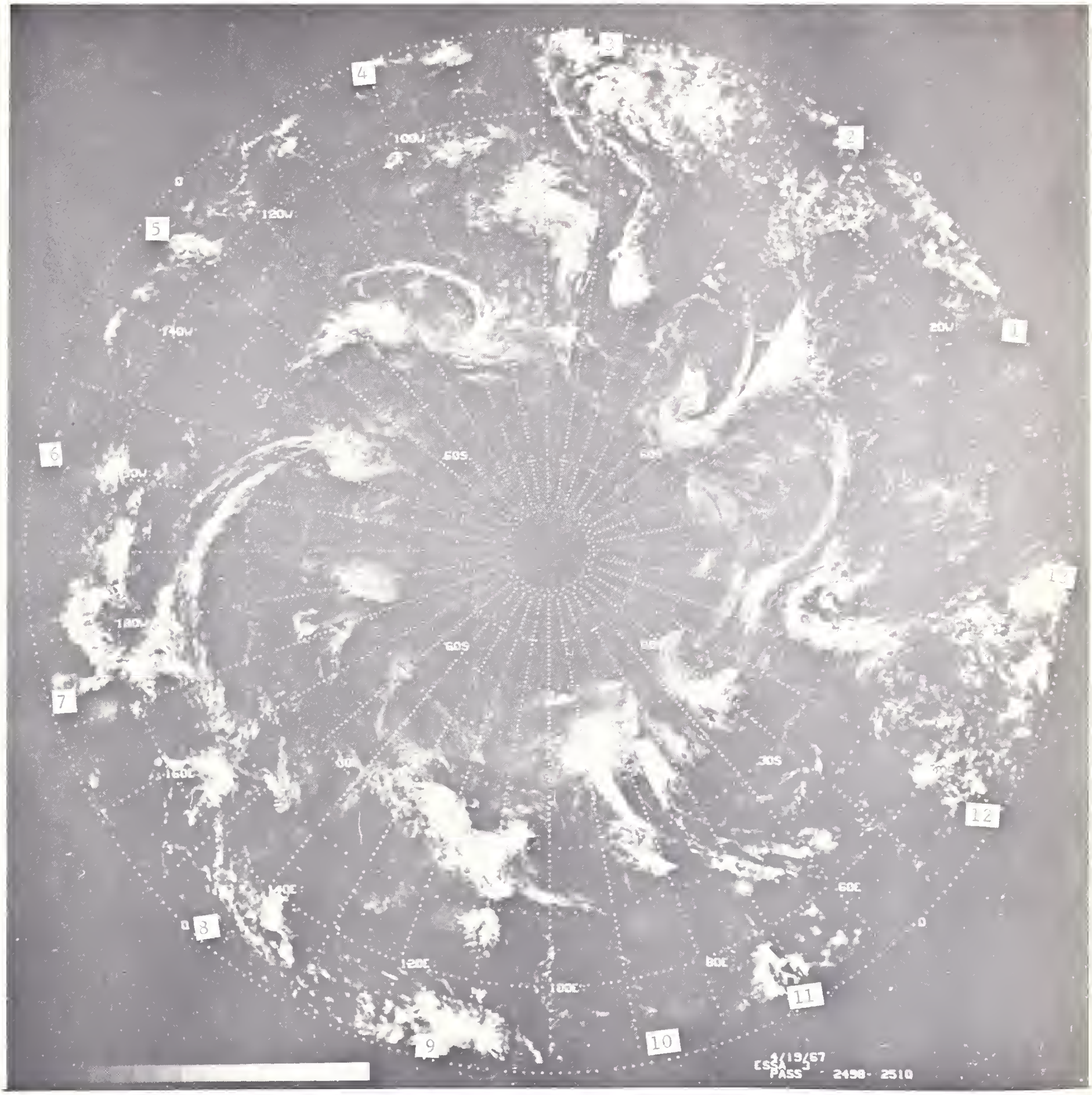
4/19/67
ESSA 3
PASS 2498- 2510



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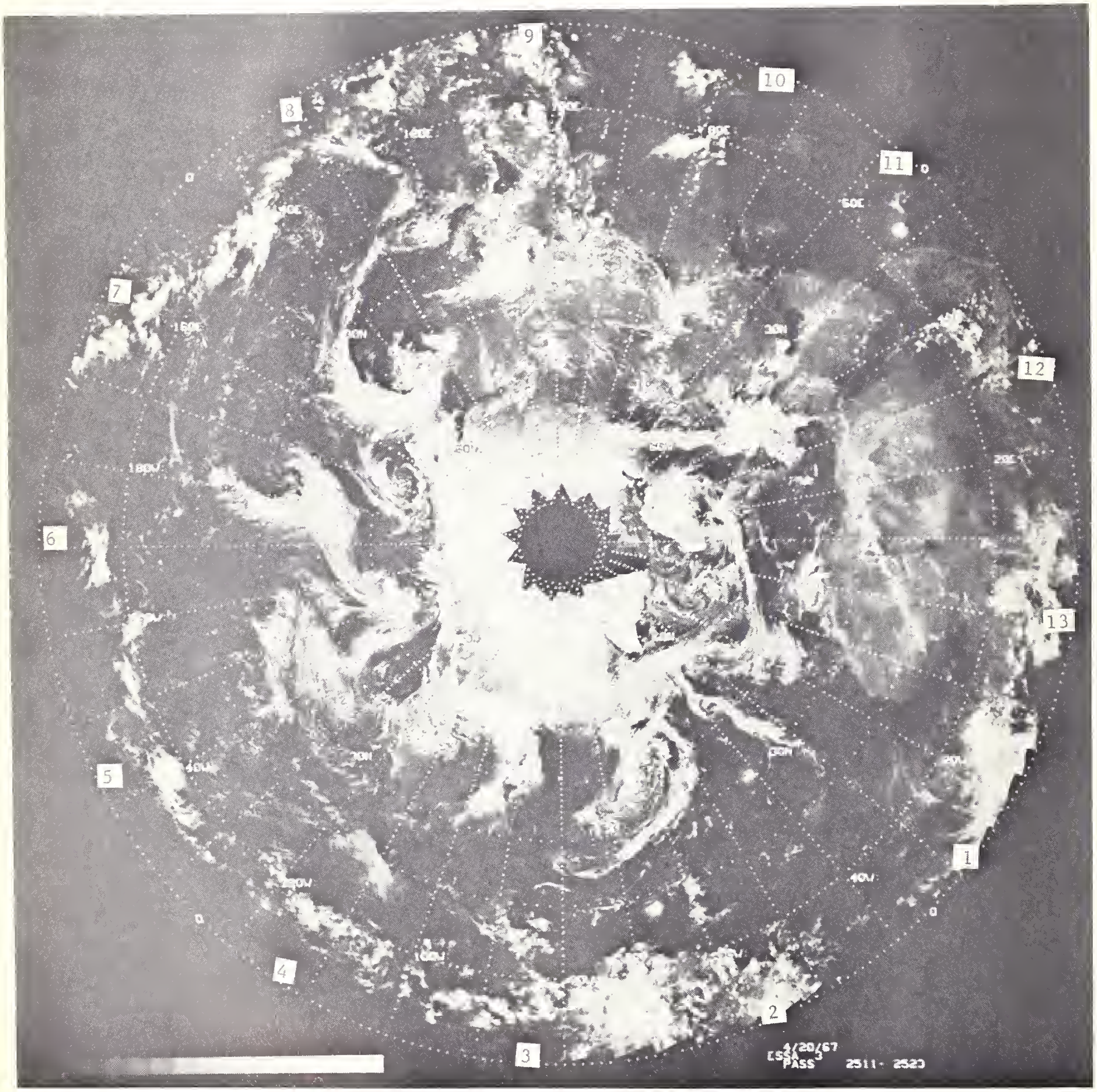
4/19/67
ESSA 3
PASS 2498- 2510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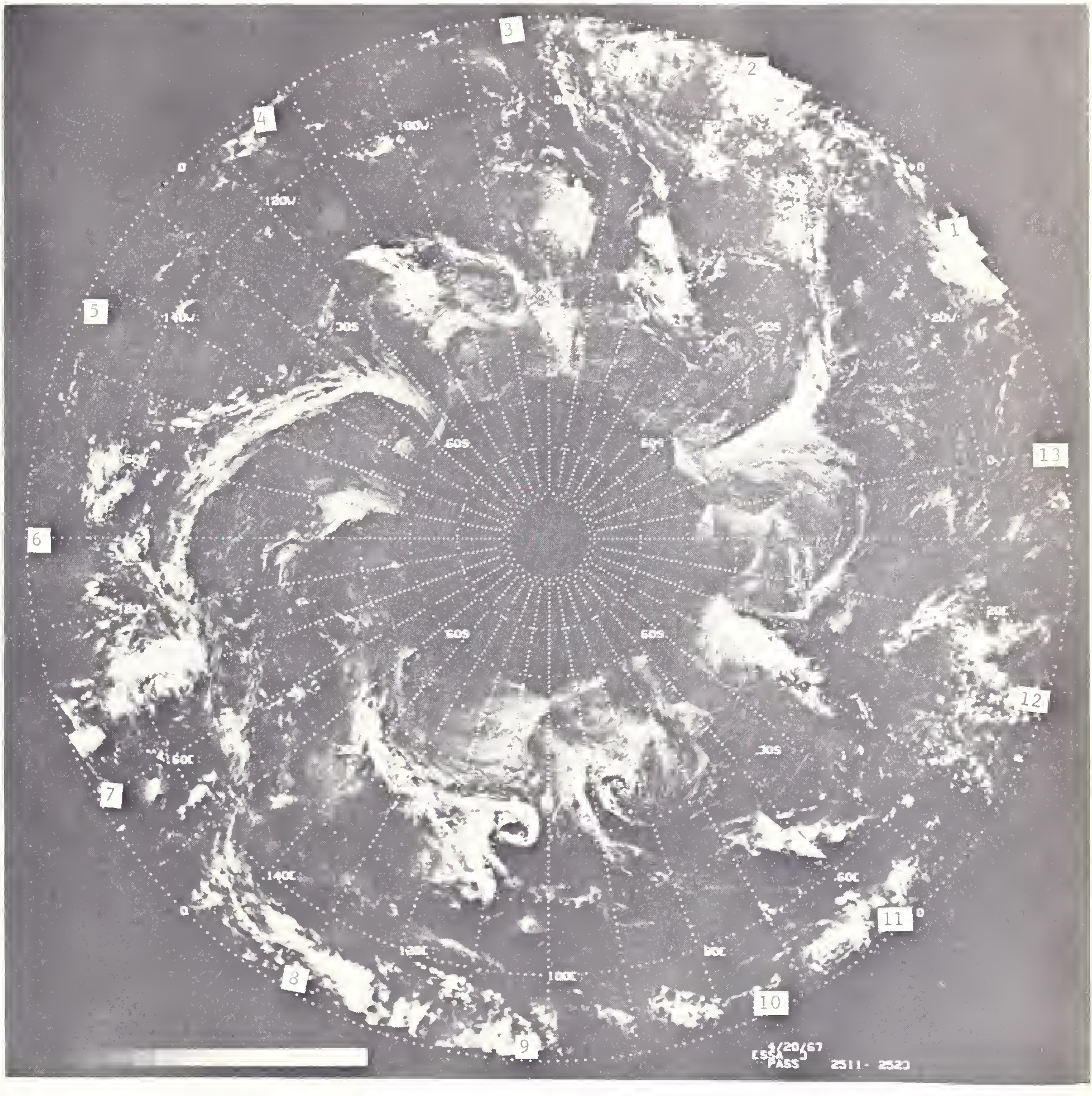
ESSA 3
PASS 2511- 2523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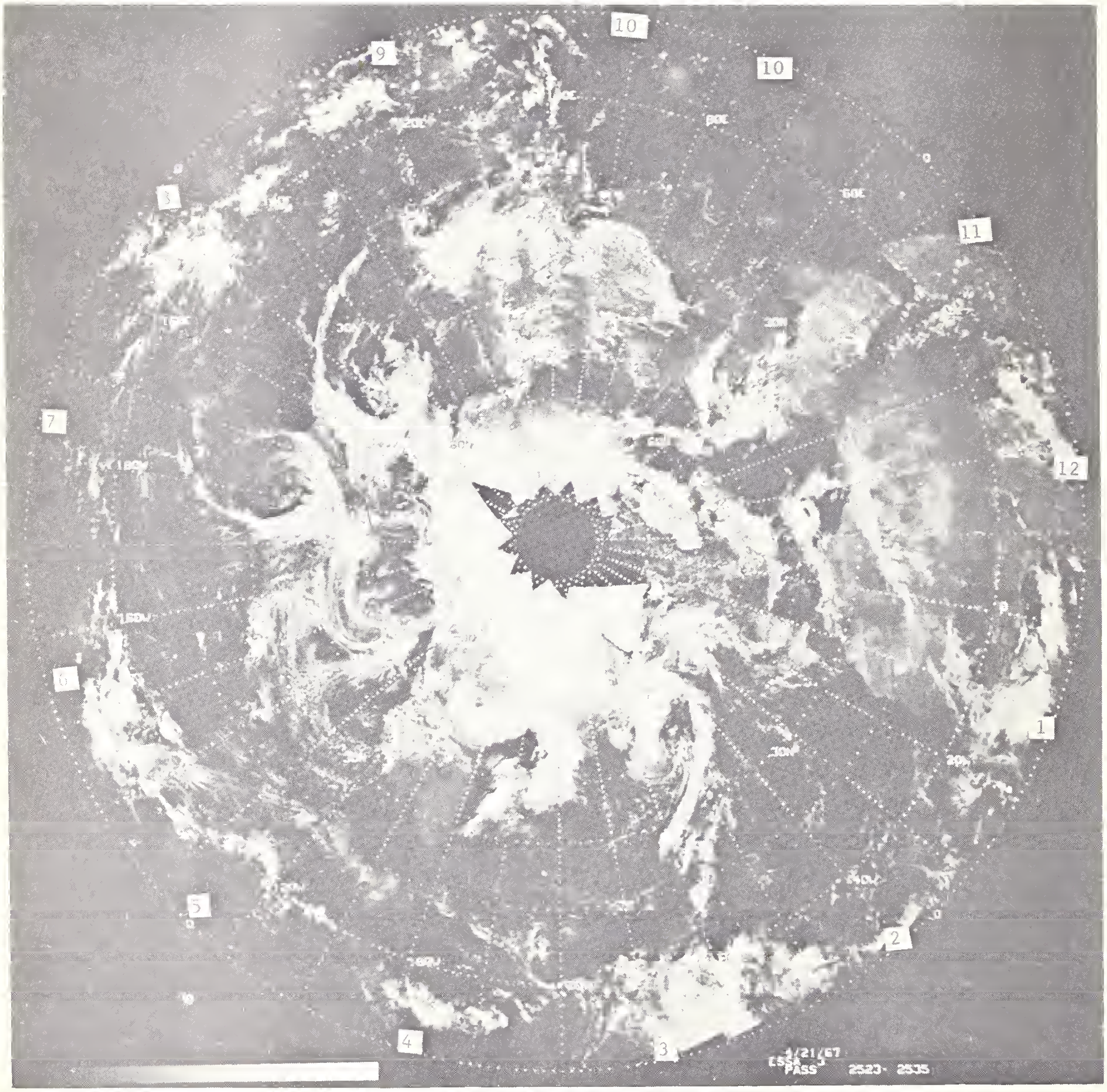
60S
4/20/67
ESSA 3
PASS 2511 - 2520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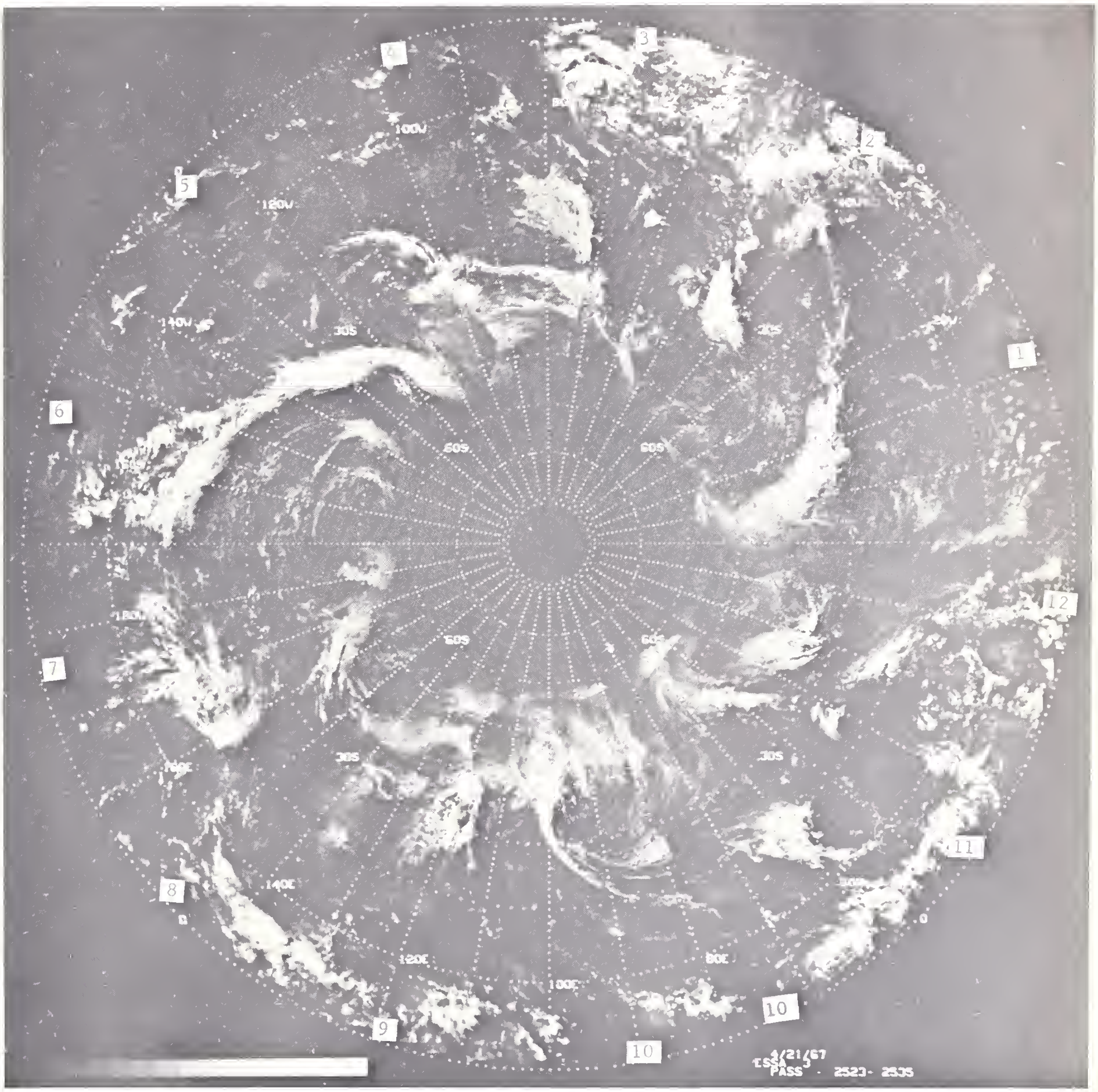
4/21/67
ESSA 3
PASS 2523- 2535



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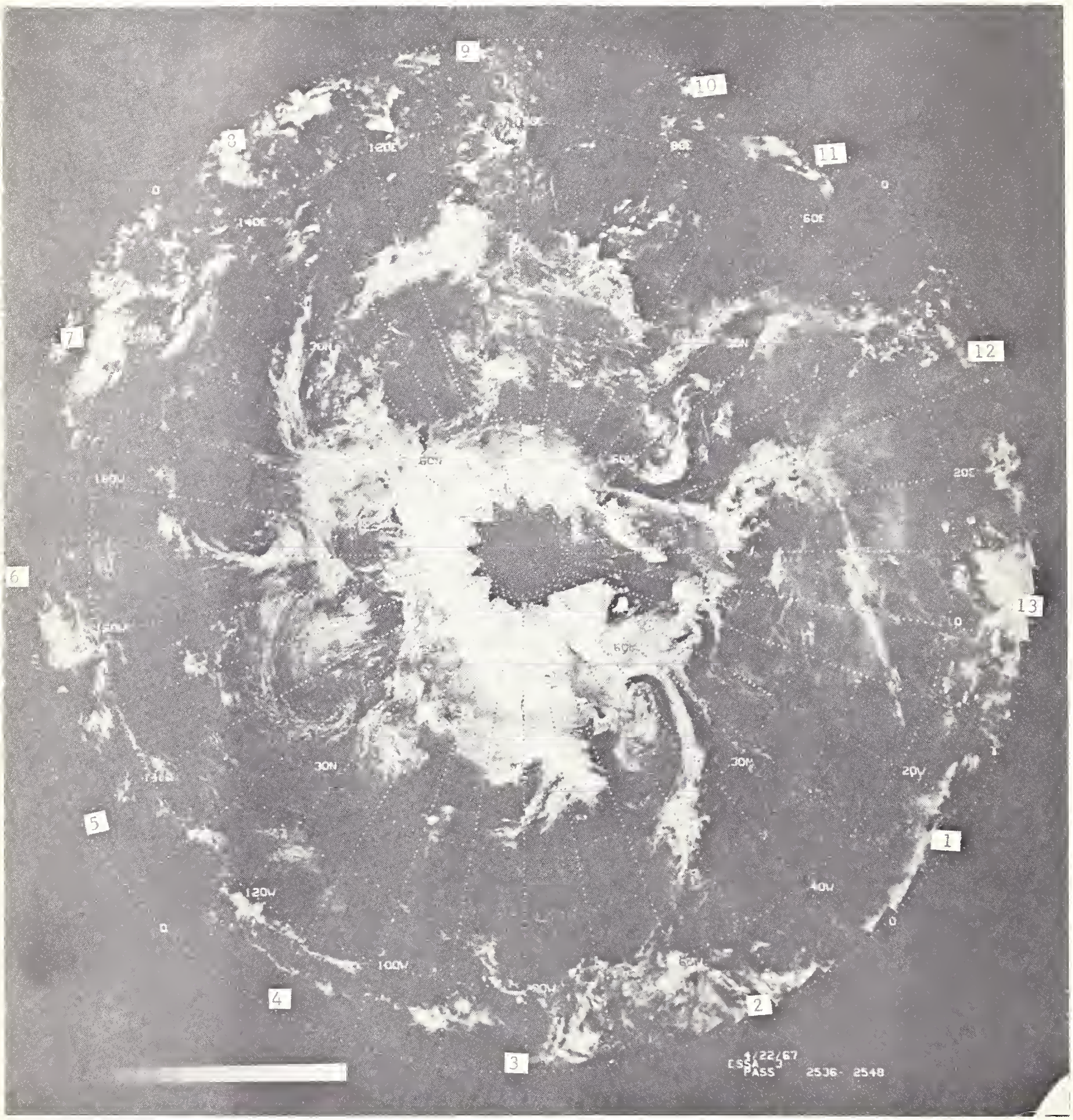
4/21/67
ESSA 3
PASS - 2523- 2535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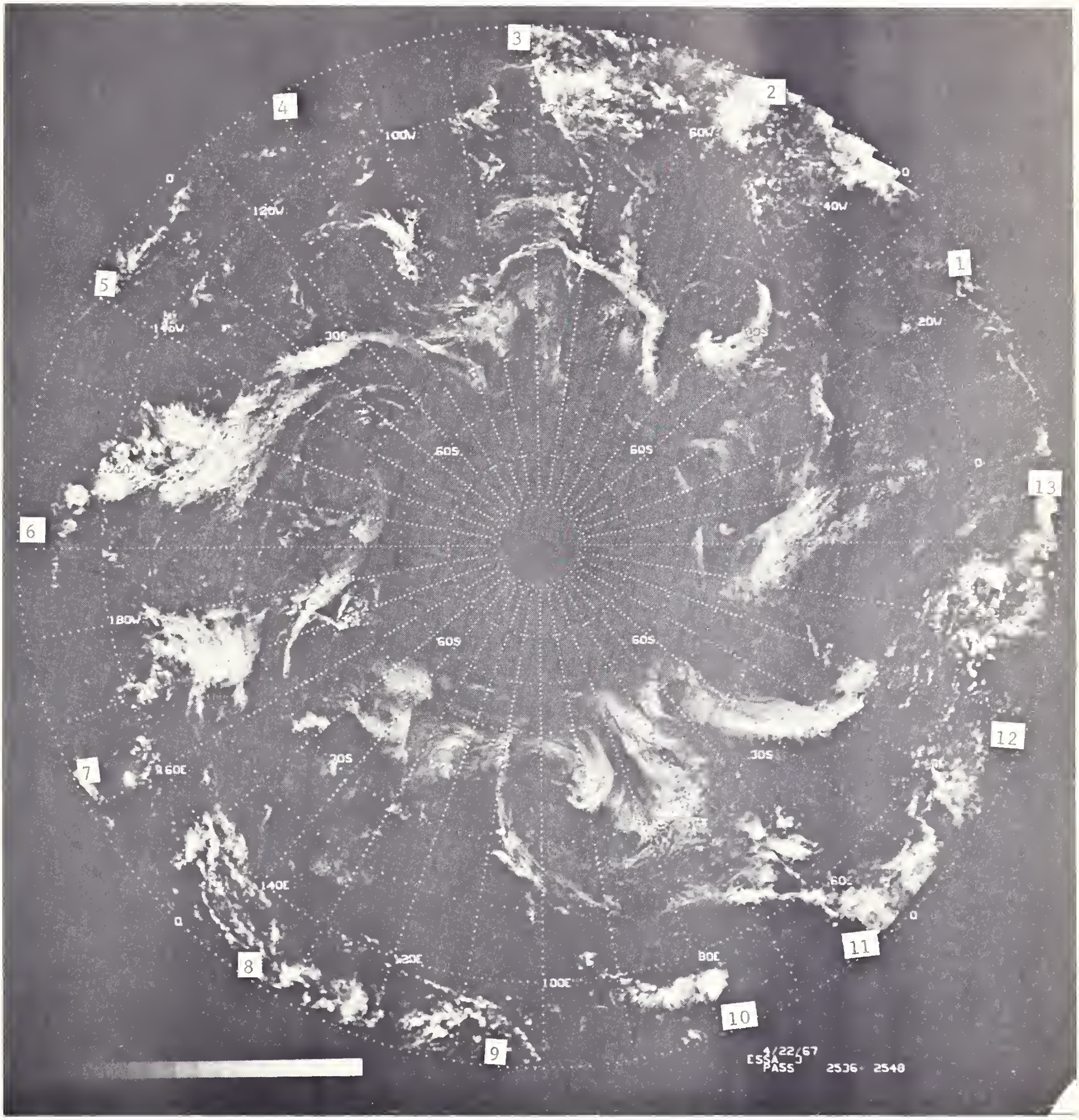
4/22/67
ESSA 3
PASS 2536- 2548



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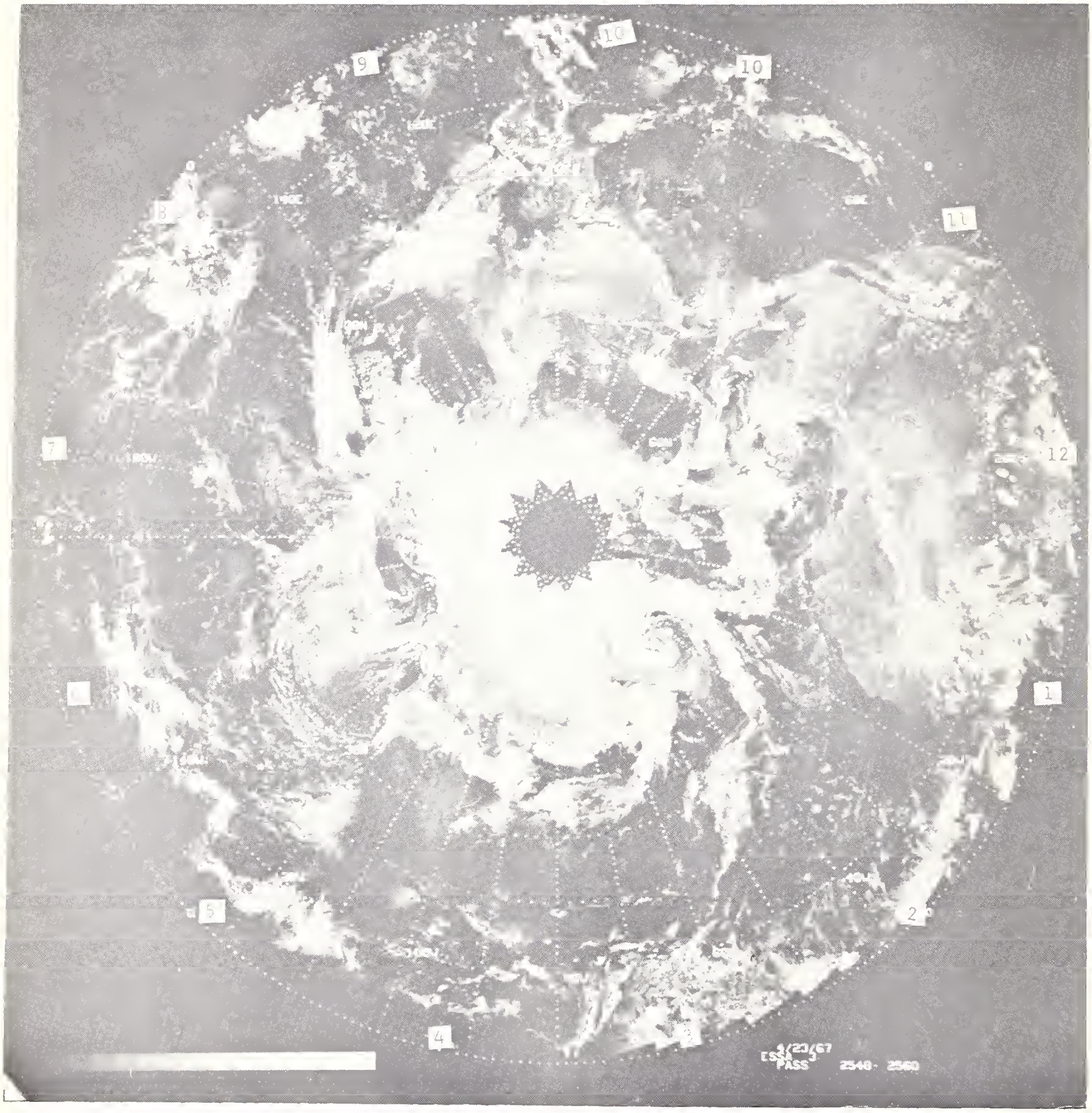
4/22/67
ESSA 3
PASS 2536 2548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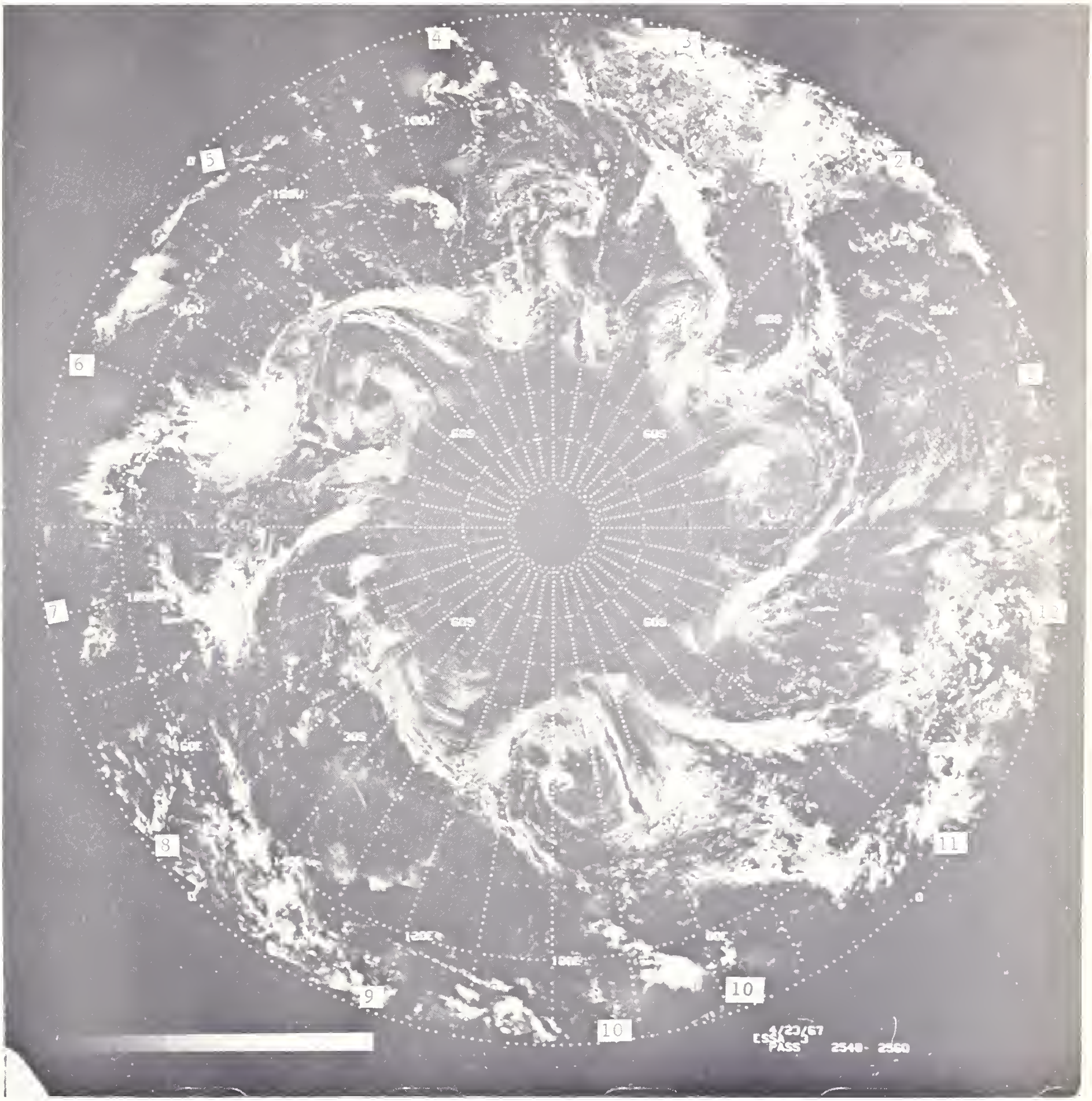
ESSA 3
PASS 2540 - 2560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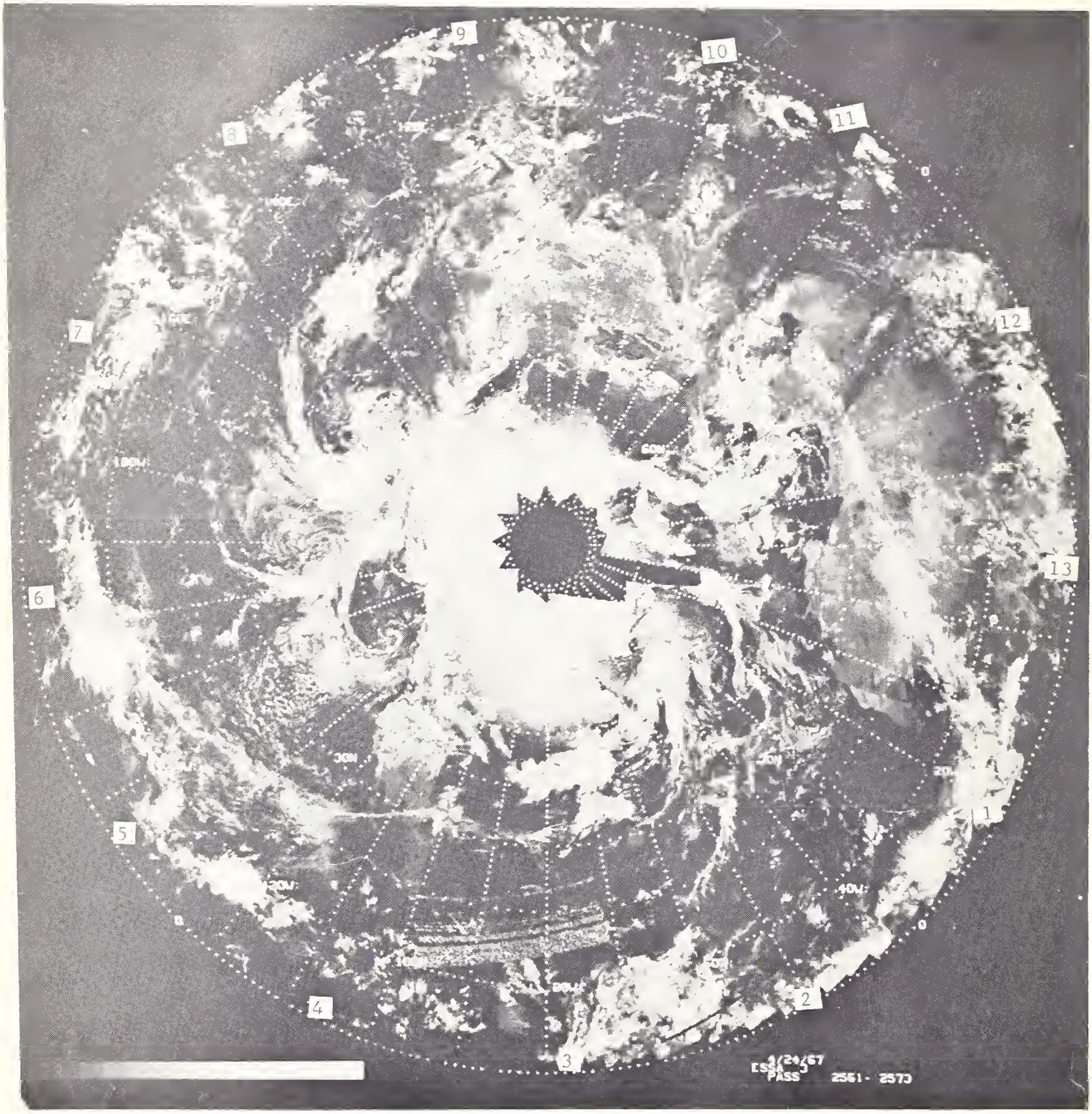
ESSA 3
PASS 2540- 2560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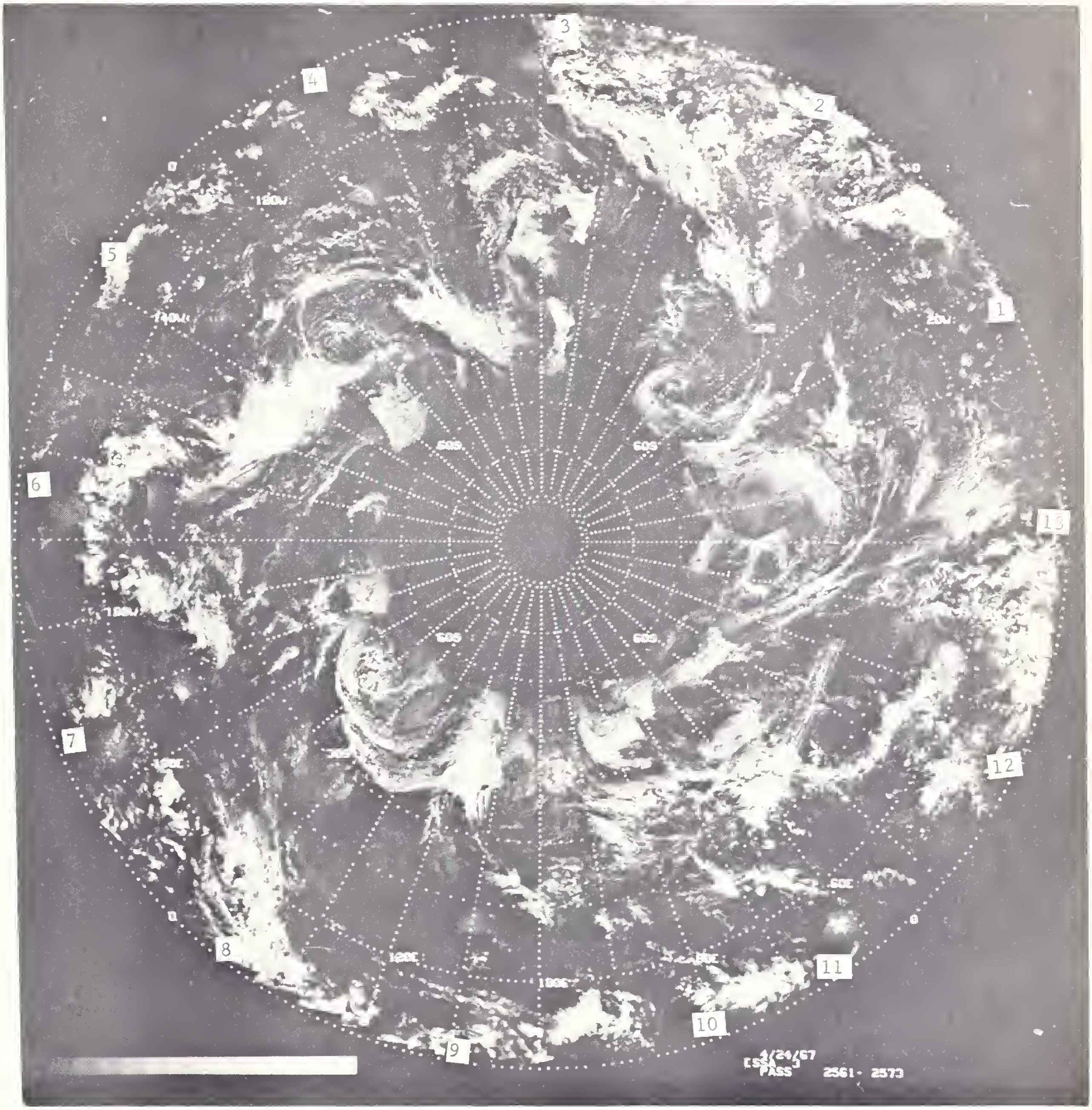
4/24/67
ESSA 3
PASS 2561- 2573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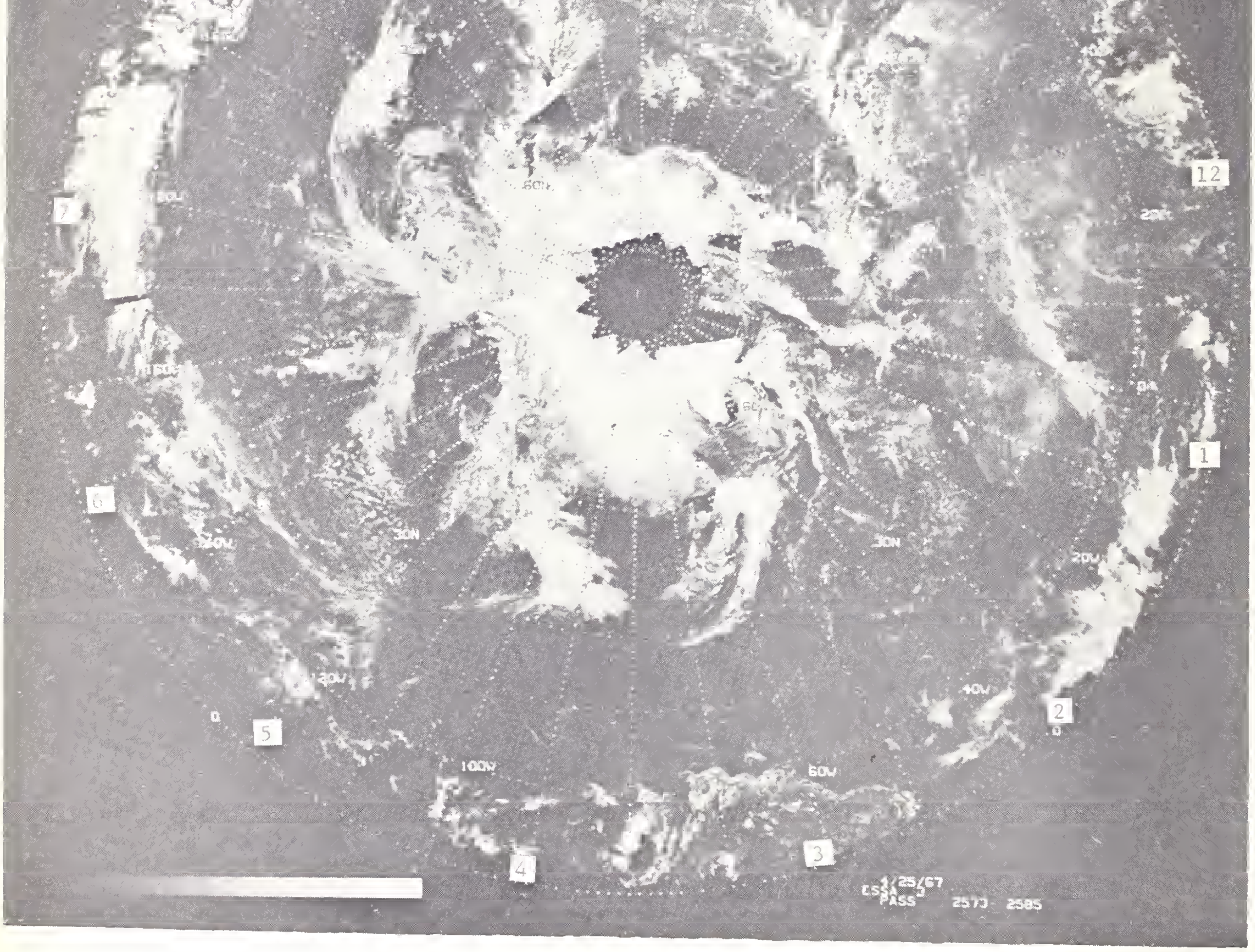
4/24/67
ESSA 3
PASS 2561- 2573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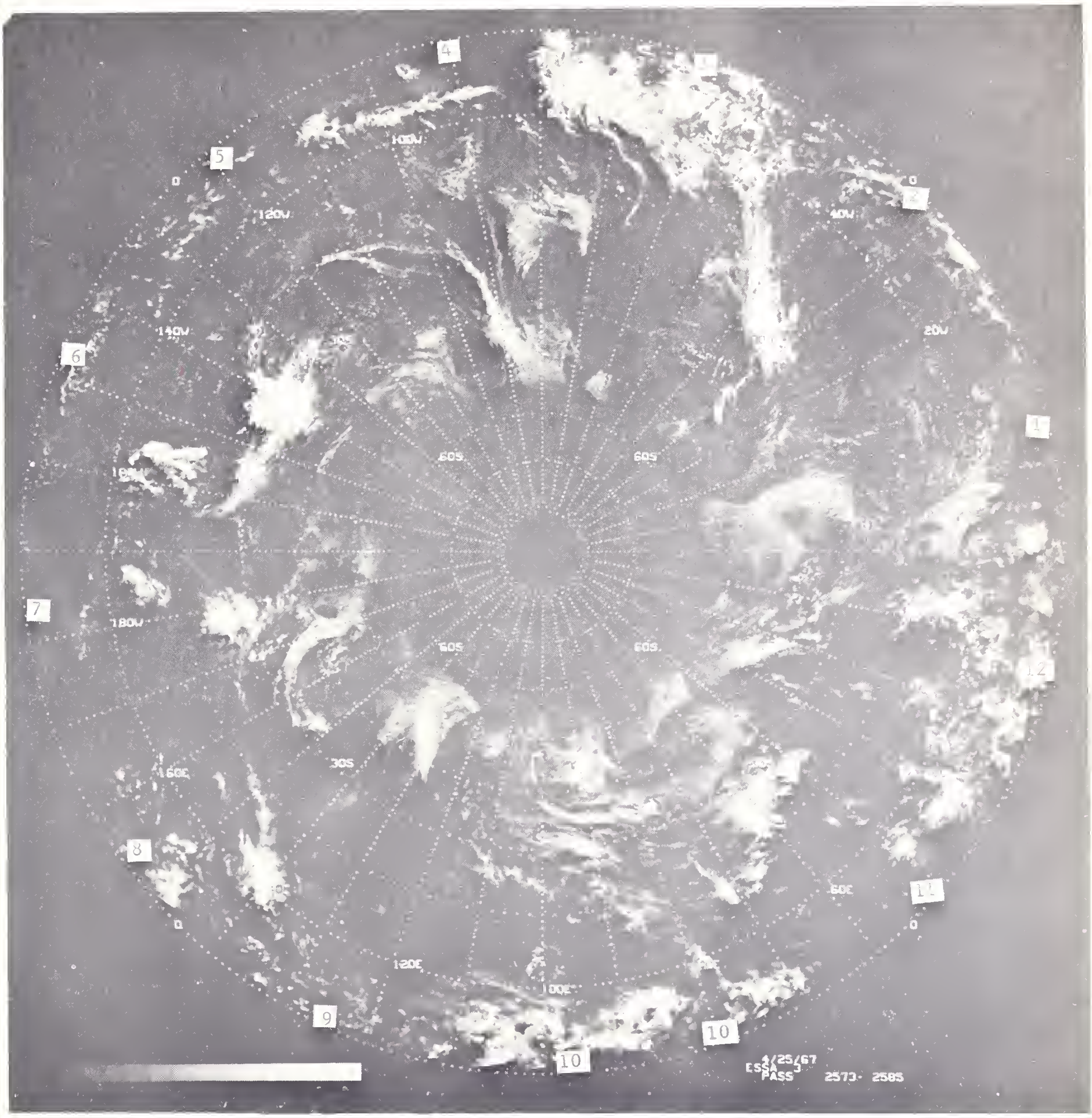
1/25/67
ESSA 3
PASS 2573 - 2585



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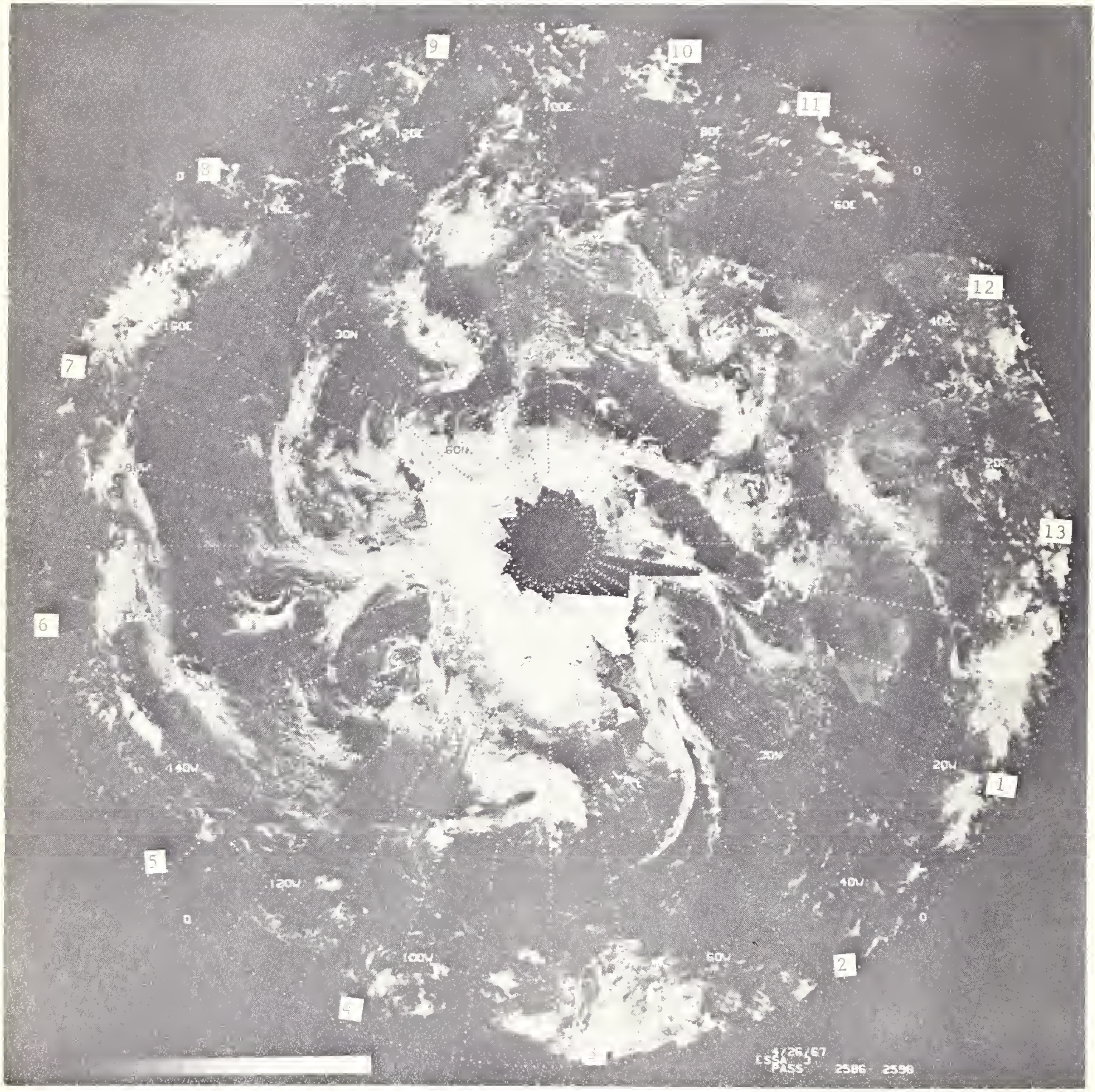
4/25/67
ESSA 3
PASS 2573- 2585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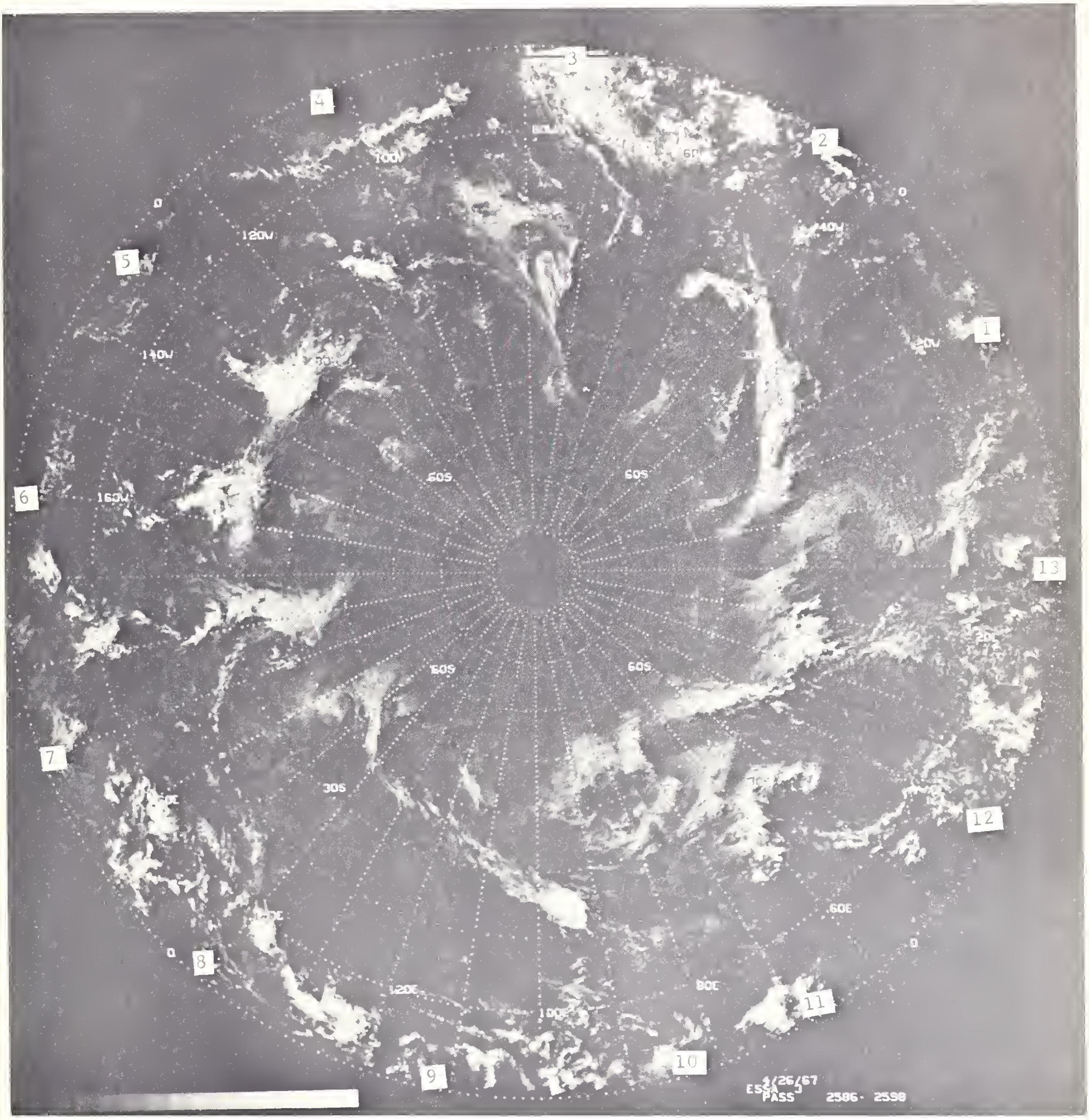
4/26/67
ESSA 3
PASS 2586 2598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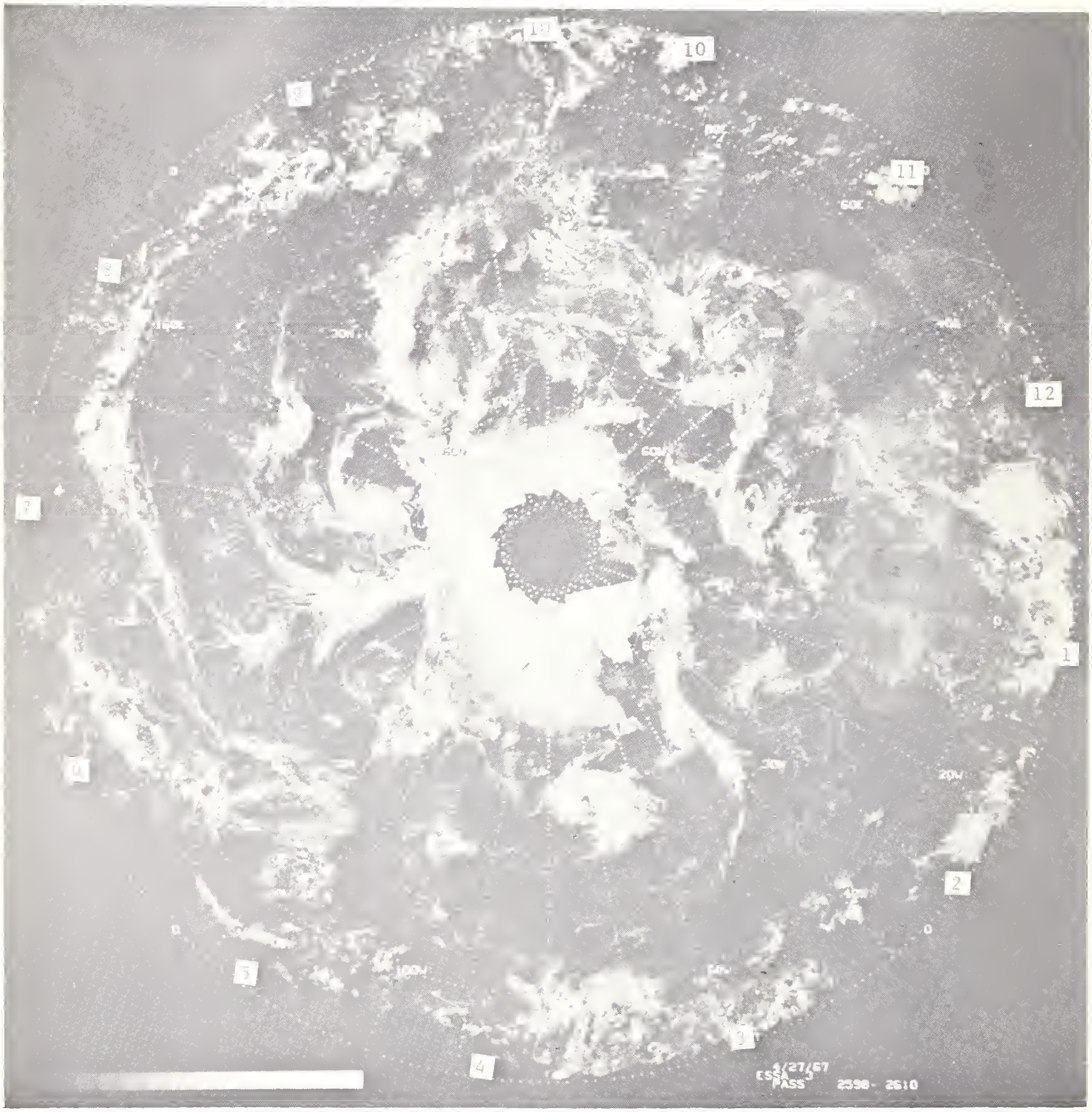
ESSA 3
PASS 2586- 2598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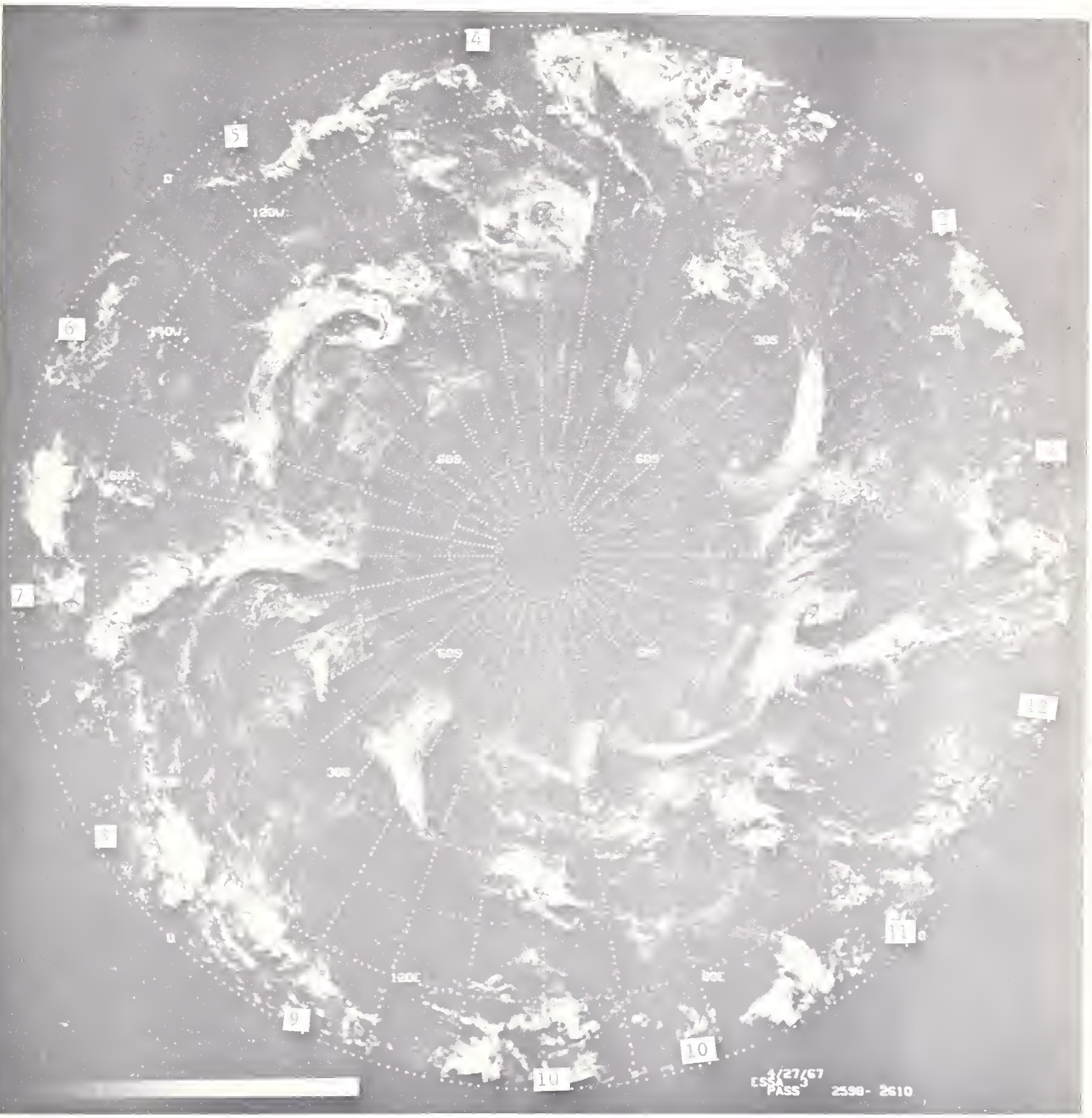
ESSA 3
PASS 2598- 2610



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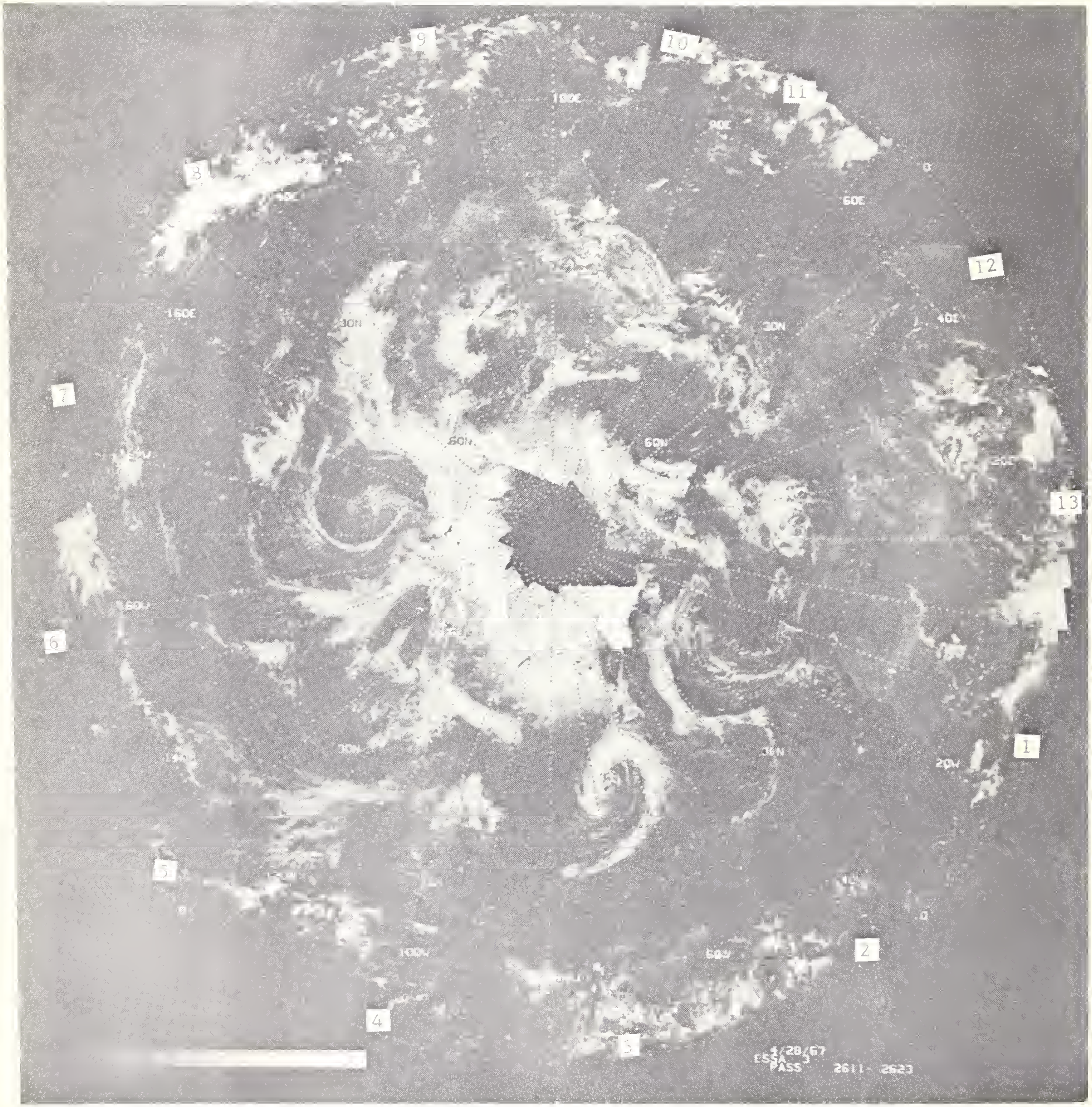
4/27/67
ESSA 3
PASS 2598- 2610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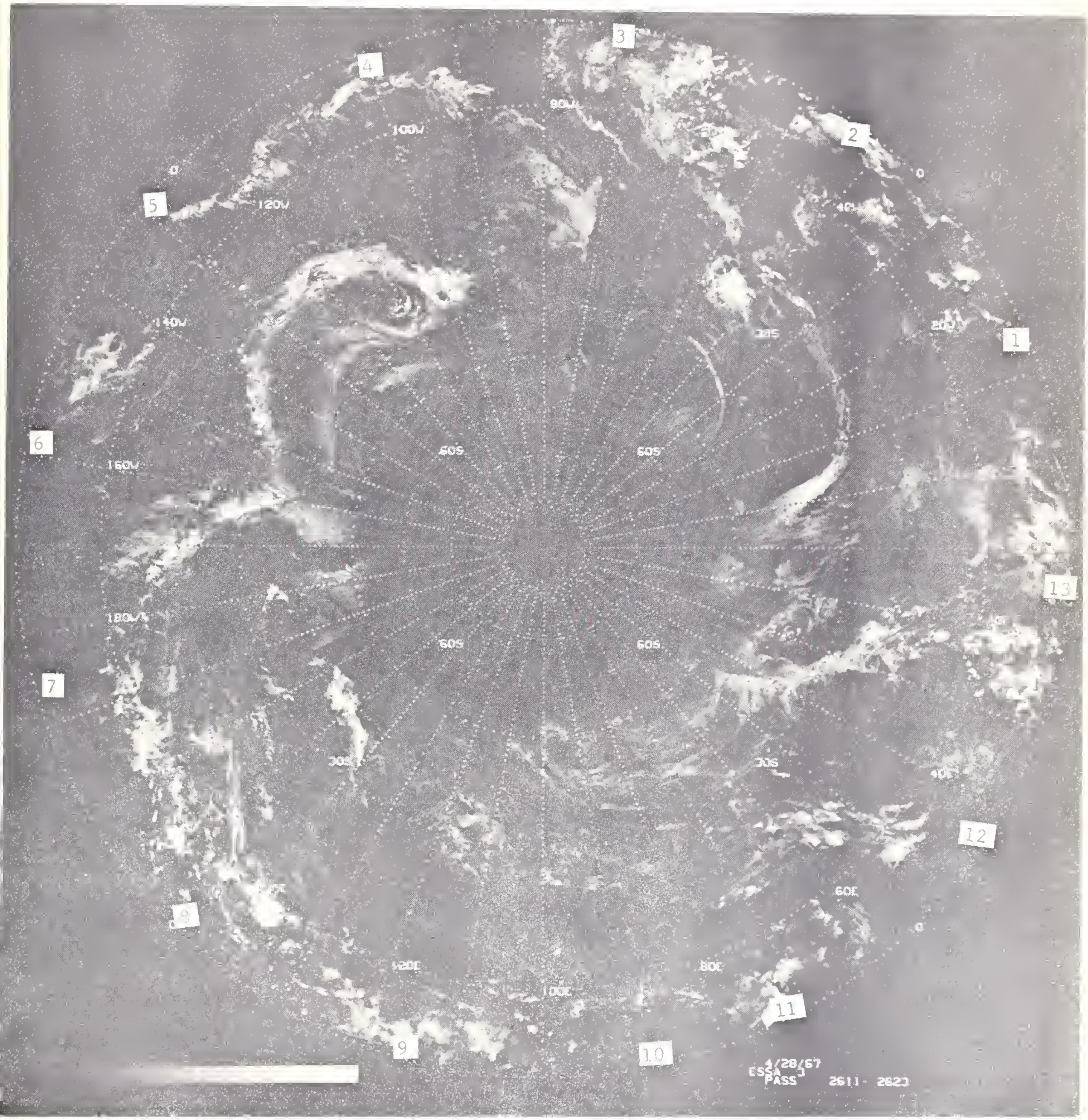
4/28/67
ESSA 3
PASS 2611 - 2623



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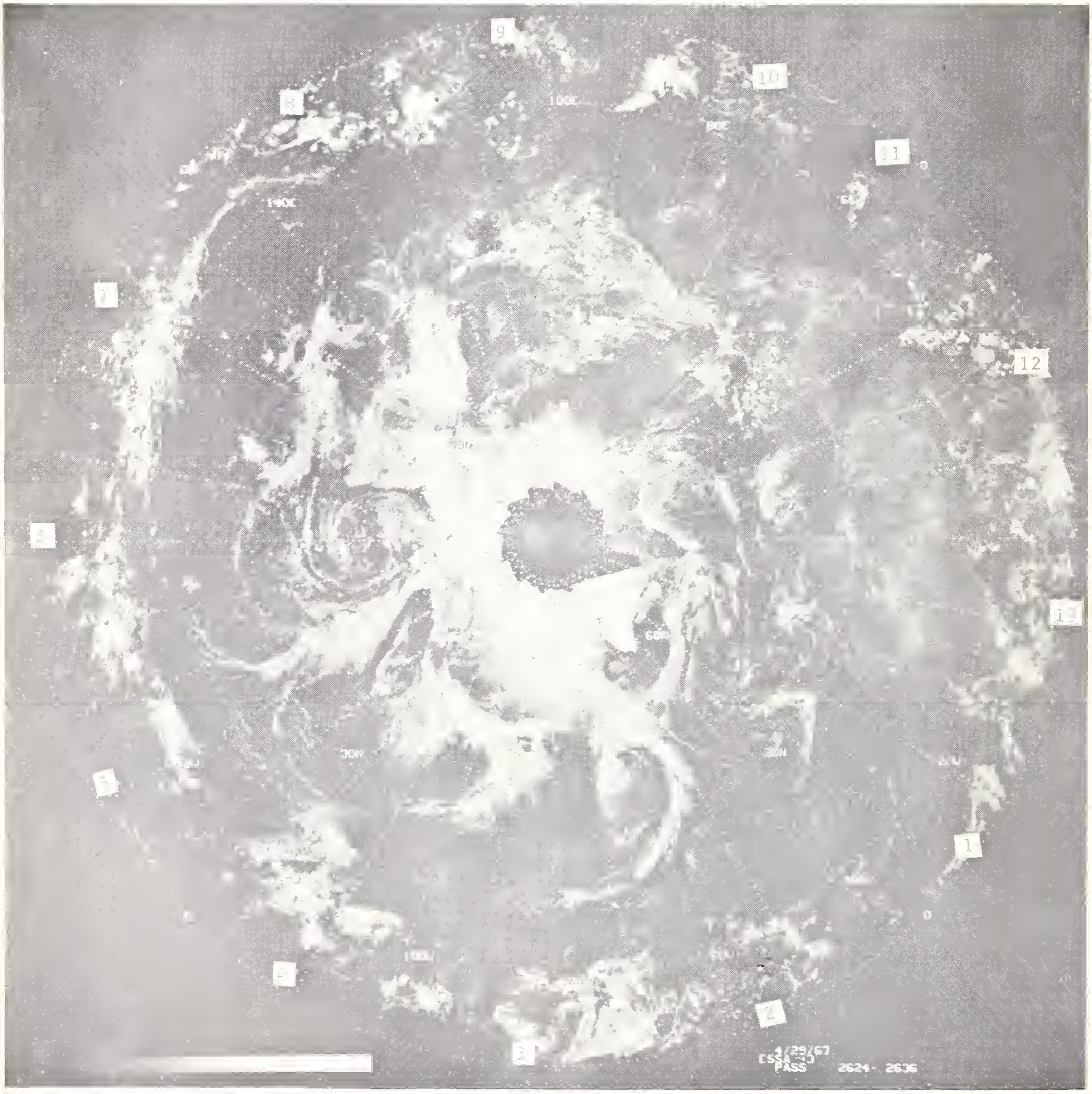
4/28/67
ESSA 3
PASS 2611 - 2623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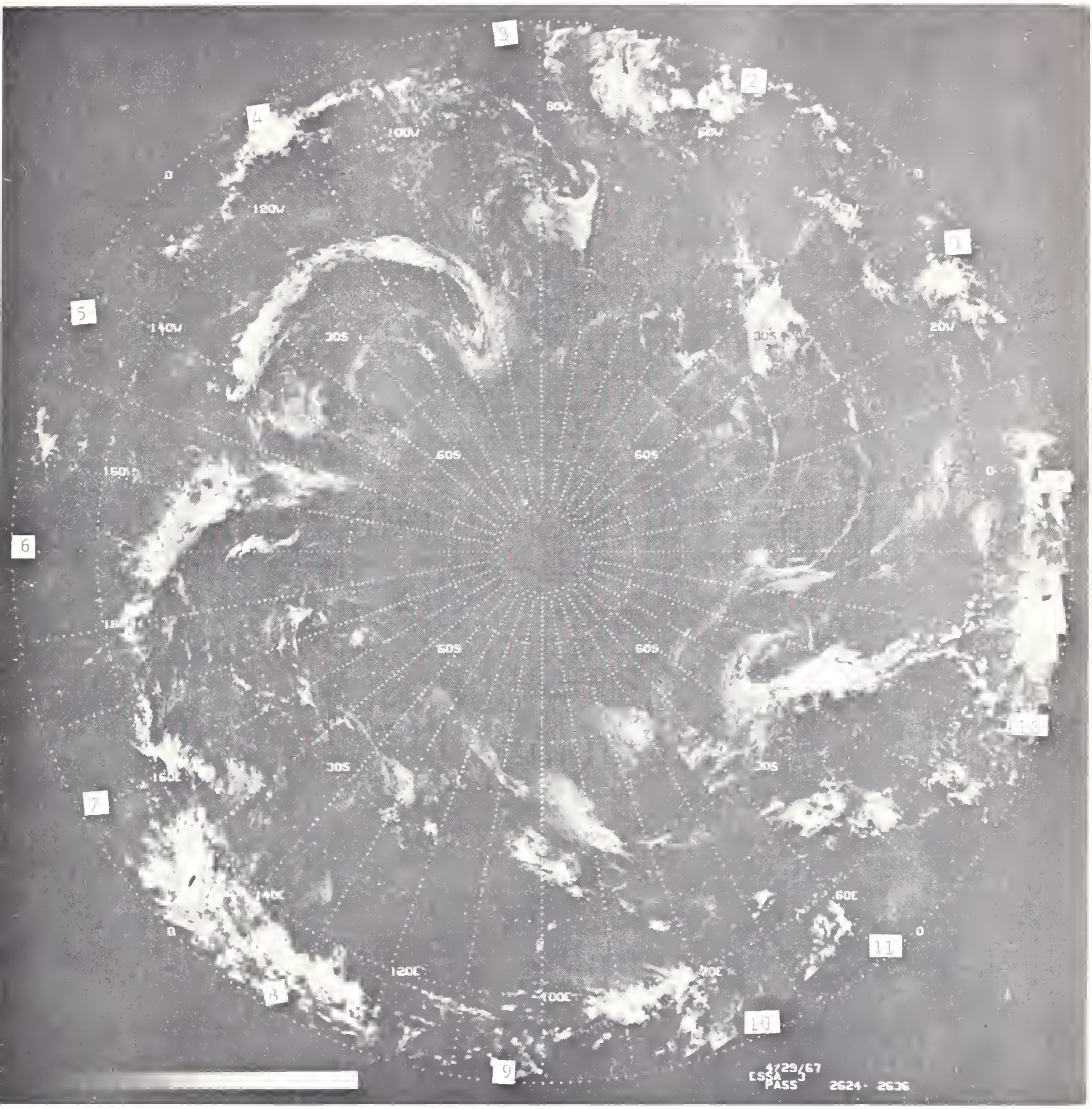
ESSA
PASS 2624 - 2636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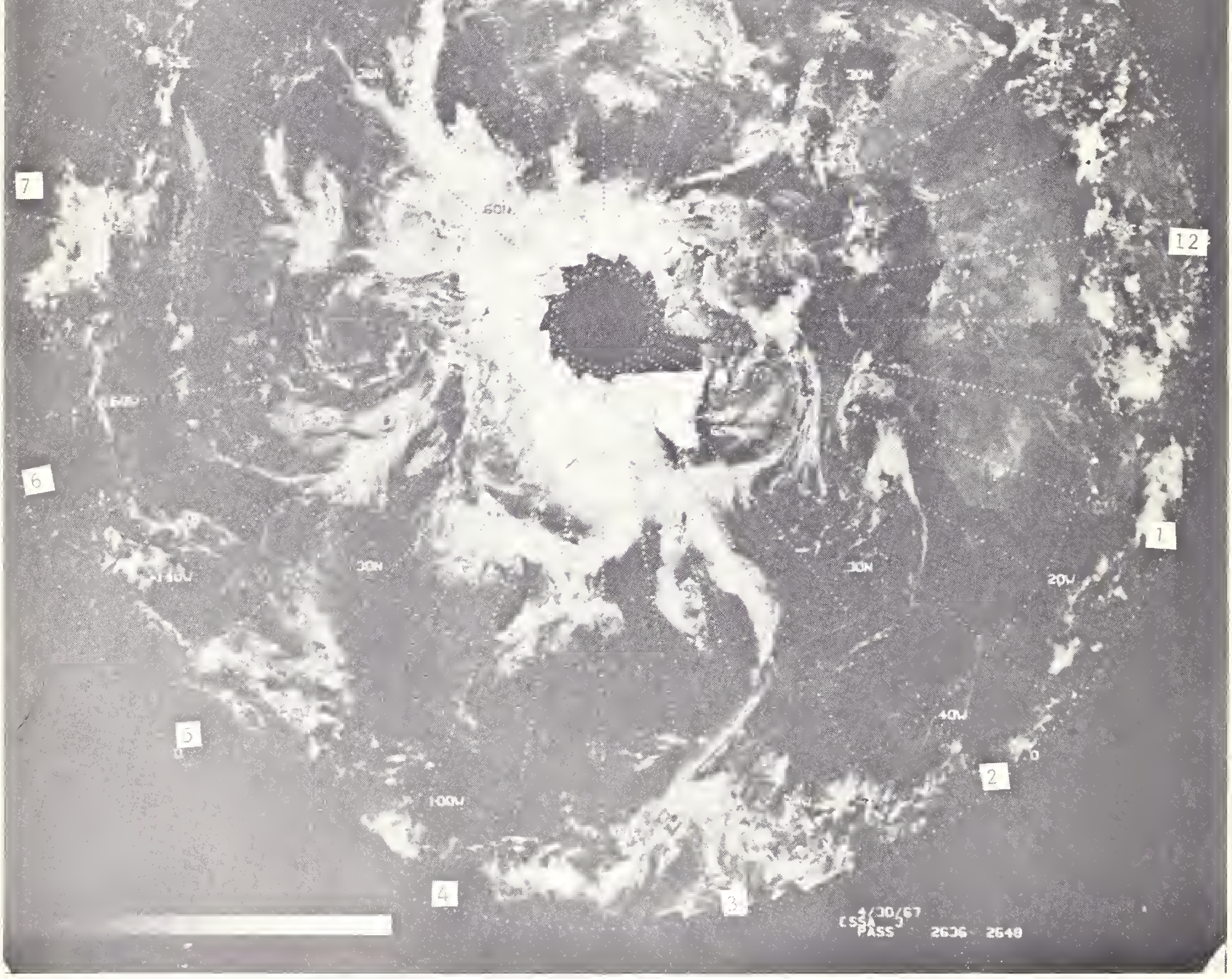
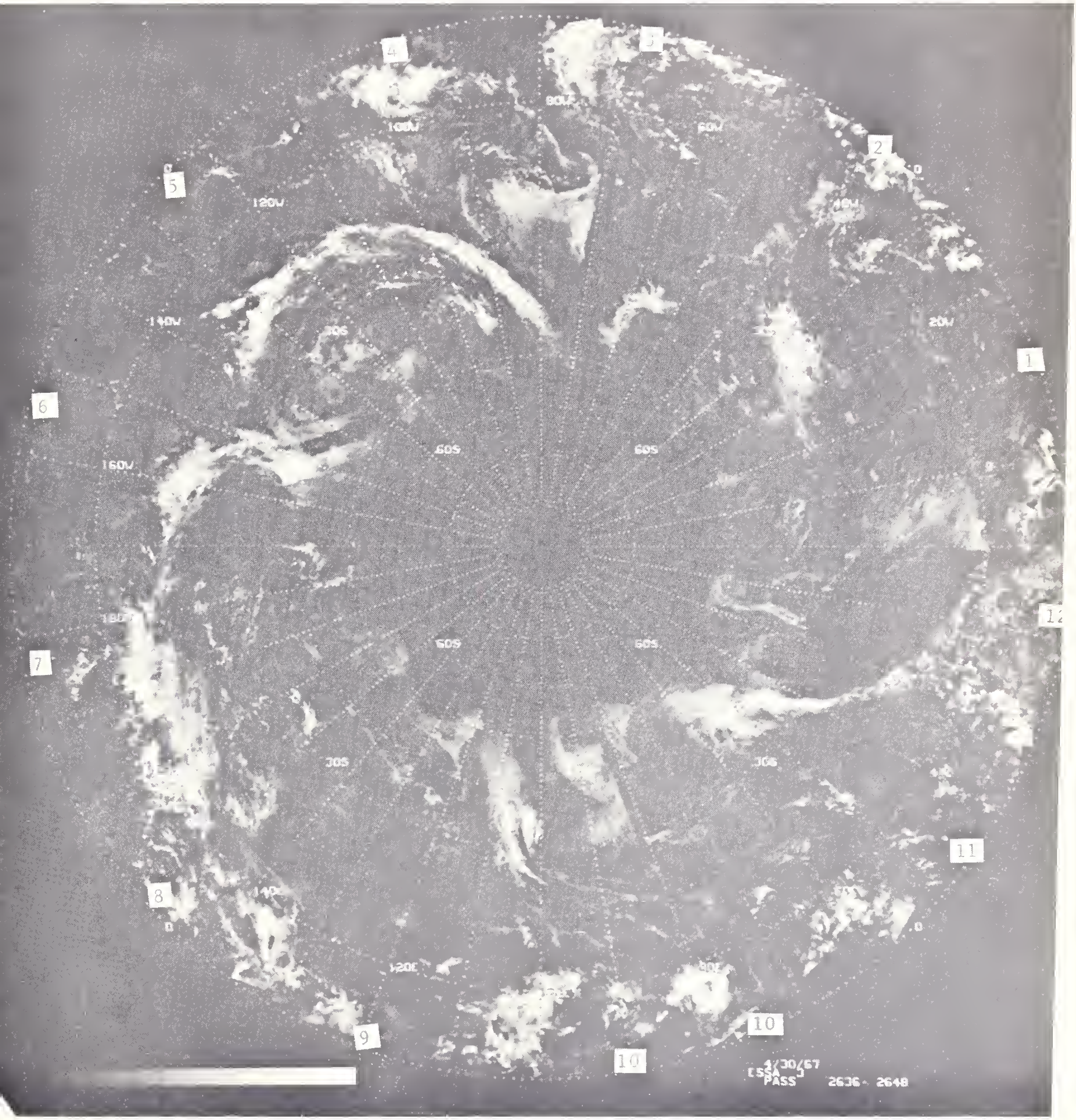
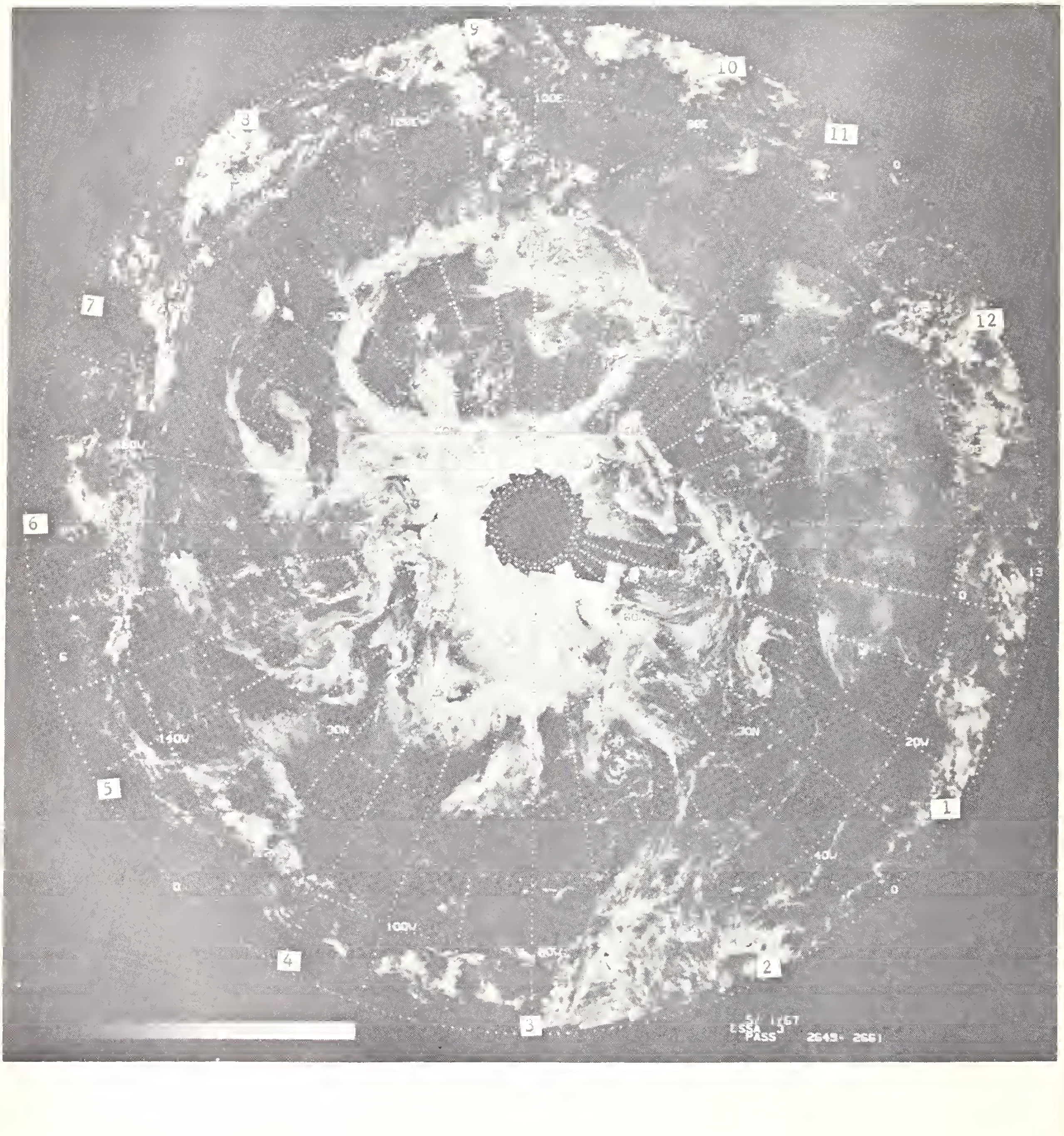
30S
30S
140E
60E
0
11
8
120E
80E
100E
10
9
4/29/67
ESSA 3
PASS 2624- 2636



10
9
10
100E
120E
80E
140E
8
60E
11
30N
30N
7
60N
12
160W
6
1
140W
30N
30N
20W
5
40W
2
100W
4
3
4/30/67
ESSA
PASS 2636 2640



4
3
80W
100W
60W
2
0
5
120W
40W
140W
30S
20W
1
6
160W
60S
60S
0
180
12
7
60S
60S
30S
30S
40E
11
8
140E
0
120E
80E
10
9
10
4/30/67
ESSA 3
PASS 2636 - 2648


9
10
3
100E
120E
80E
11
0
140E
60E
7
30N
30N
12
60N
160W
6
13
0
60N
140W
30N
30N
20W
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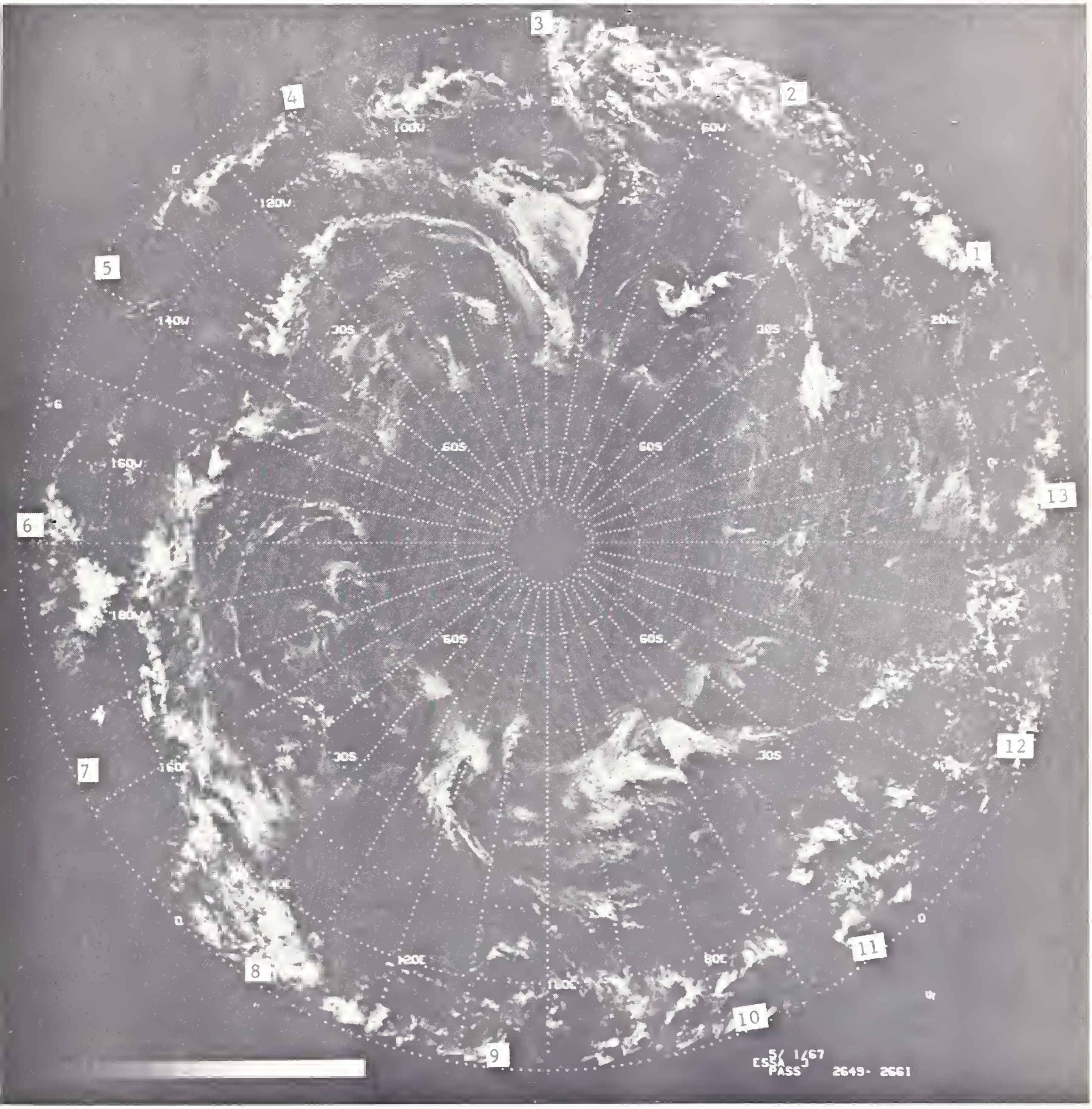
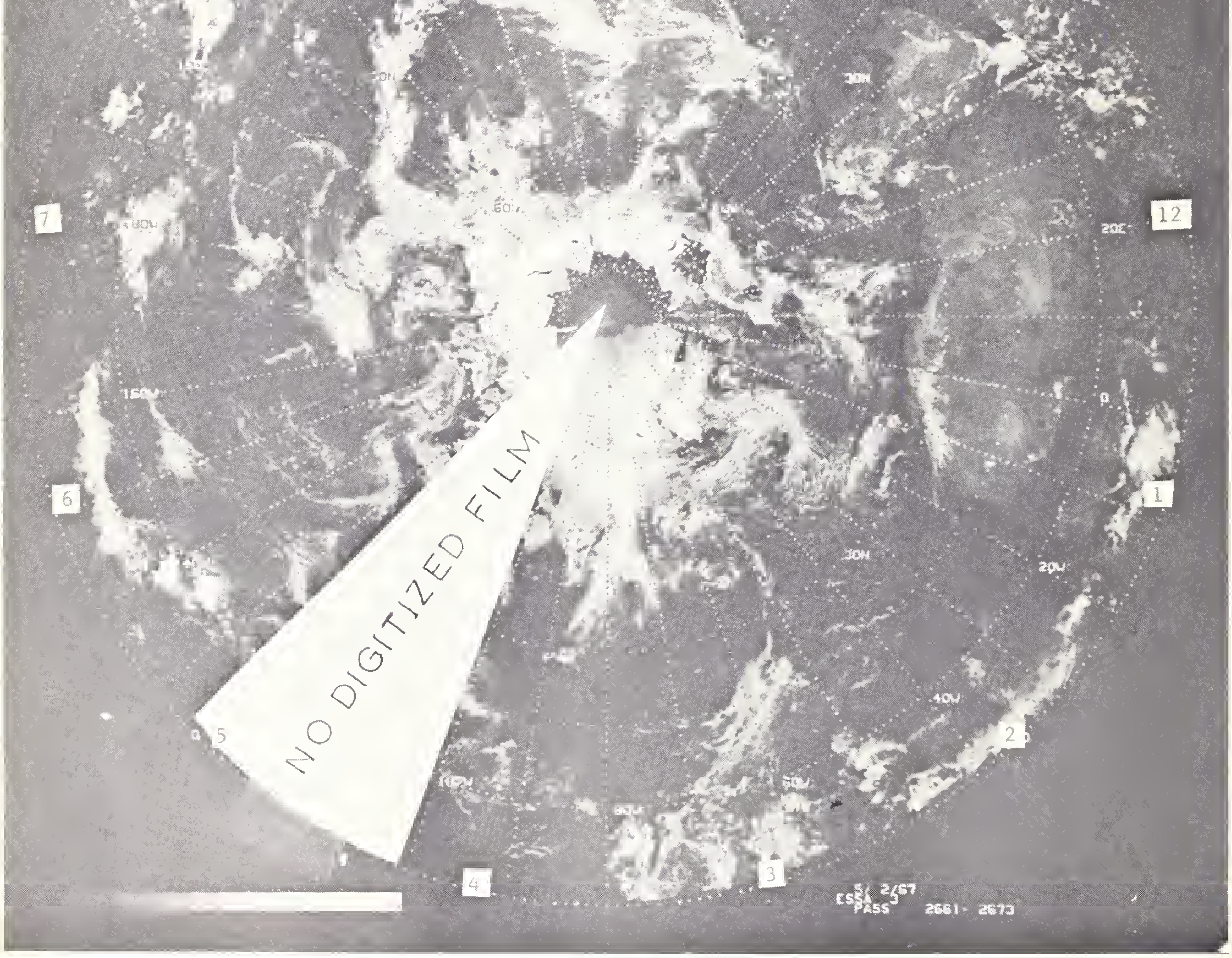
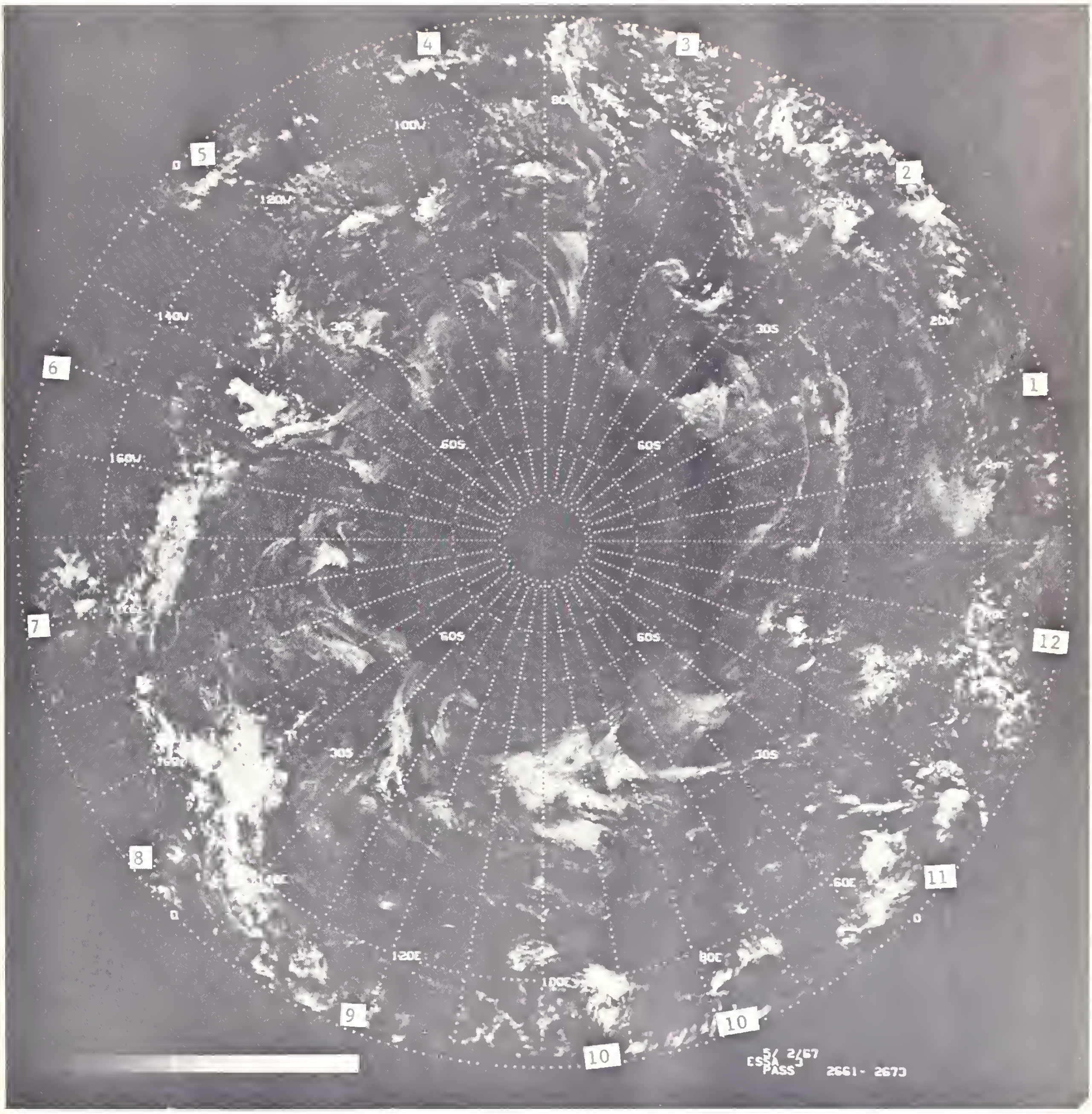
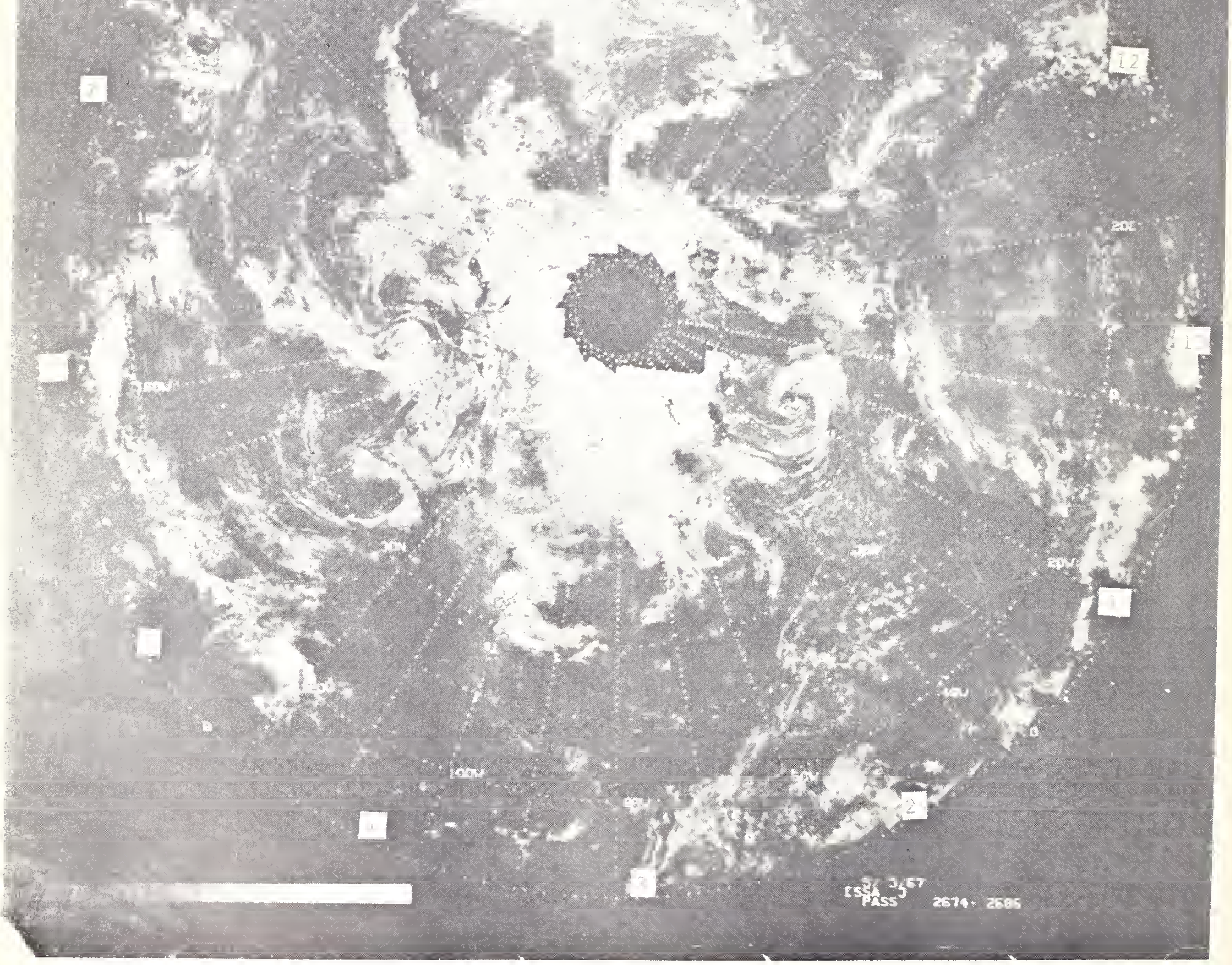
1
40W
0
0
100W
4
80W
2
3
5/ 1967
ESSA 3
PASS 2649- 2661

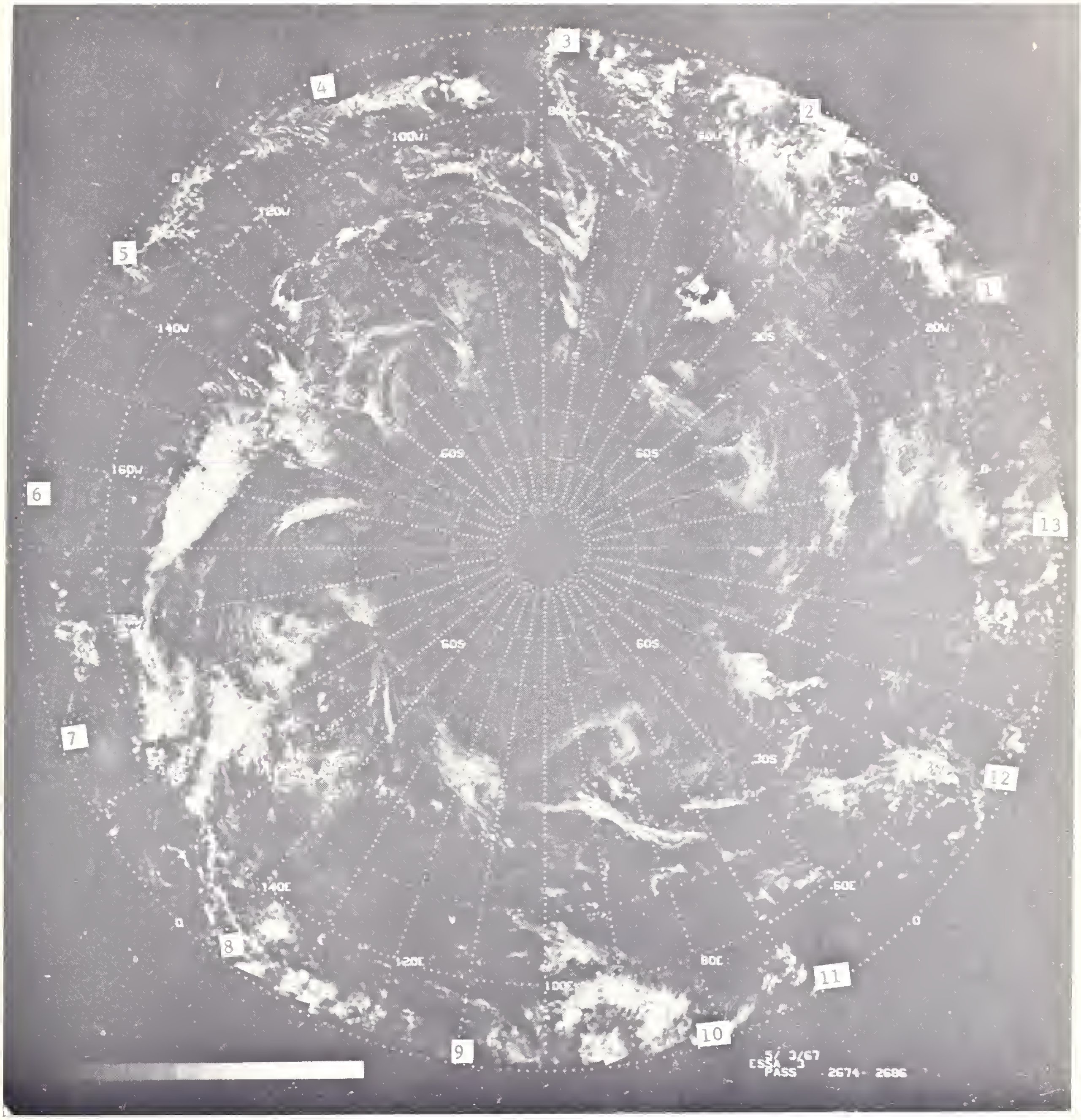

3
2
4
1
5
6
13
7
12
8
11
9
10
100W
80W
60W
40W
20W
120W
140W
160W
180W
160E
140E
120E
100E
80E
60E
40E
30S
60S
5/ 1/67
ESSA 3
PASS 2649- 2661


10
10
9
8
11
12
7
6
1
5
4
3
2
140E
60E
0
30N
60N
20E
0
160W
30N
20W
40W
60W
80W
NO DIGITIZED FILM
5/ 2/67
ESSA 3
PASS 2661- 2673


4
3
80W
100W
5
0
120W
2
20W
140W
30S
30S
6
1
60S
60S
160W
7
12
60S
60S
180
30S
30S
8
140E
11
60E
0
120E
80E
100E
9
10
10
5/ 2/67
ESSA 3
PASS 2661- 2673



120E
80E
60E
60N
30N
20E
0
20W
40W
60W
80W
100W
30N
3/ 3/67
ESSA 5
PASS 2674- 2686


3
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80W
100W
60W
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40W
120W
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140W
30S
20W
60S
60S
160W
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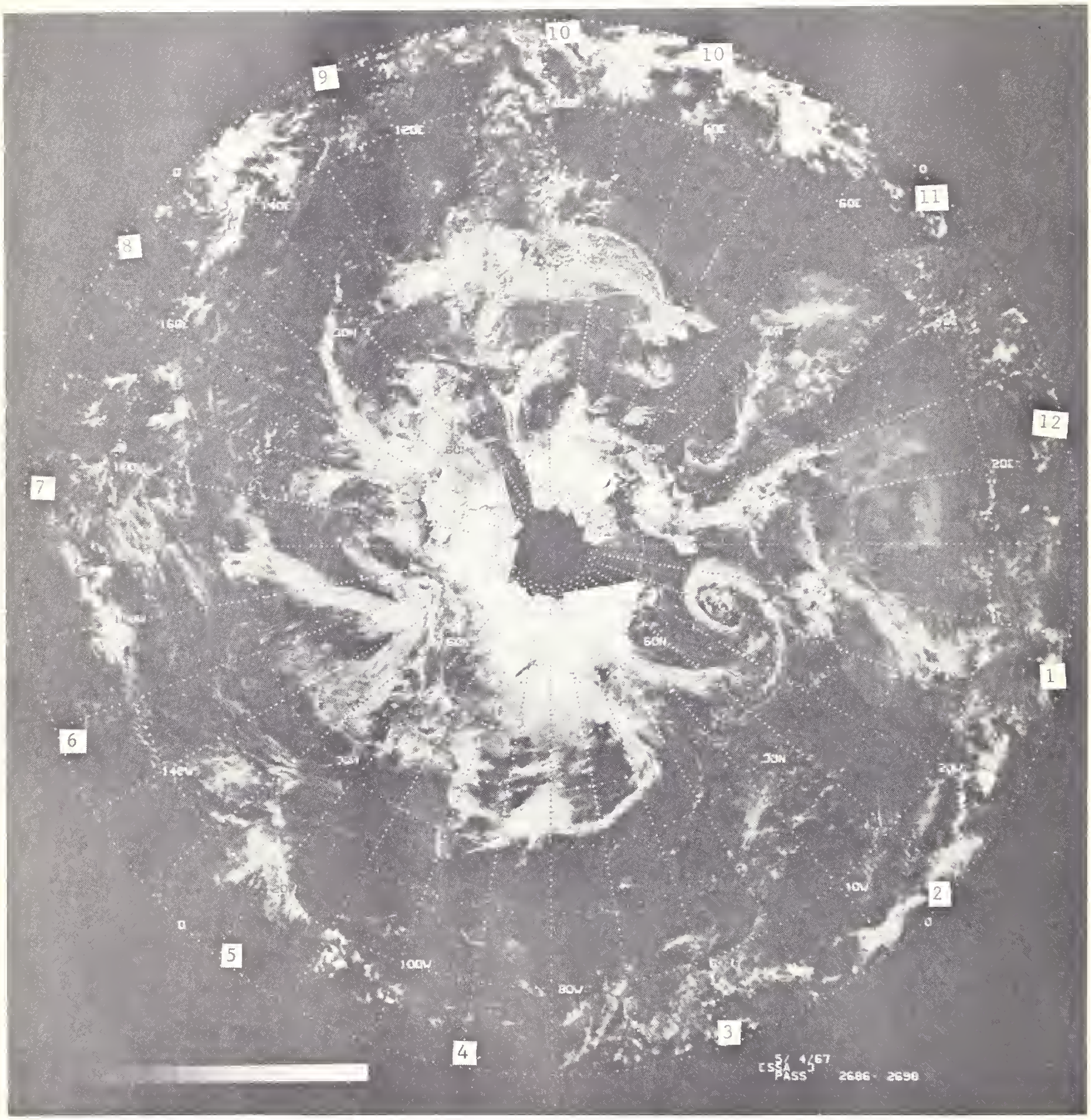
6
13
60S
60S
7
30S
12
140E
60E
0
0
8
80E
120E
11
100E
10
9
5/ 3/67
ESSA 3
PASS 2674- 2686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120E
80E
140E
60E
11
8
160E
12
7
1
6
140W
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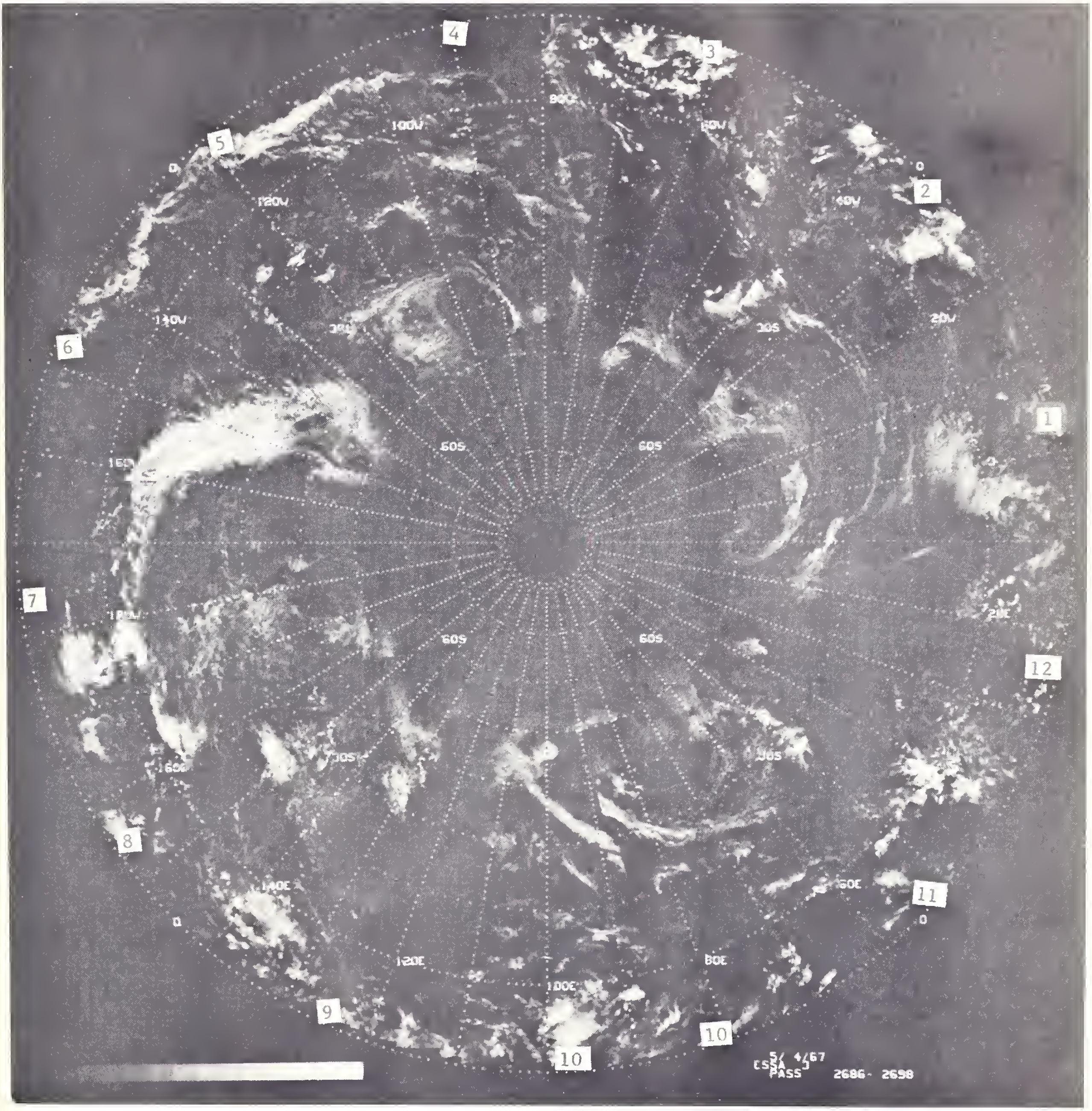
30N
60N
2
10W
5
100W
80W
3
4
5/ 4/67
ESSA 3
PASS 2686- 2698


1
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11
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80W
100W
60W
120W
40W
140W
20W
160W
180W
20E
160E
140E
120E
100E
80E
60E
30S
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60S
60S
60S
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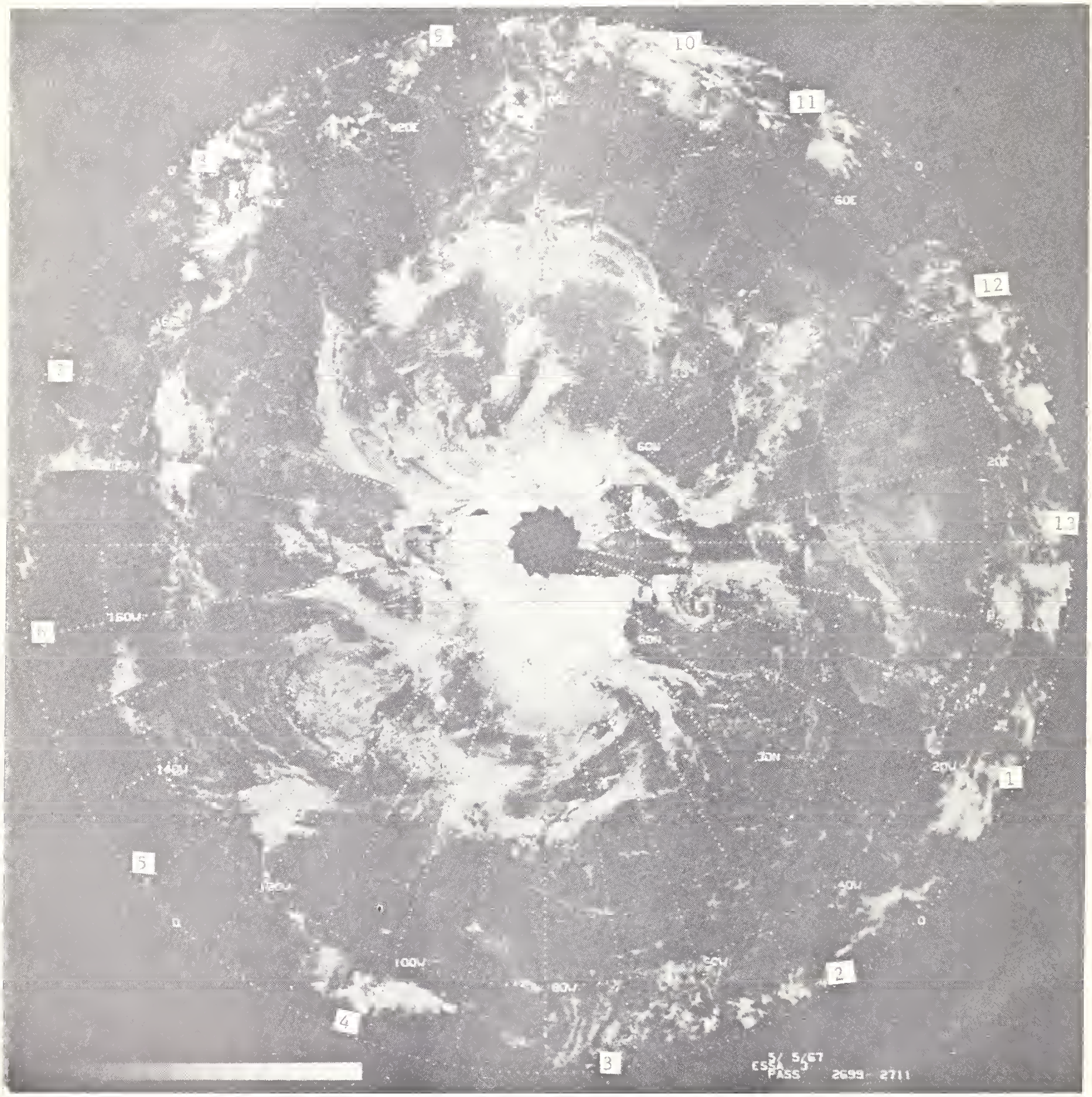
0
5/ 4/67
ESSA 3
PASS 2686- 2698


9
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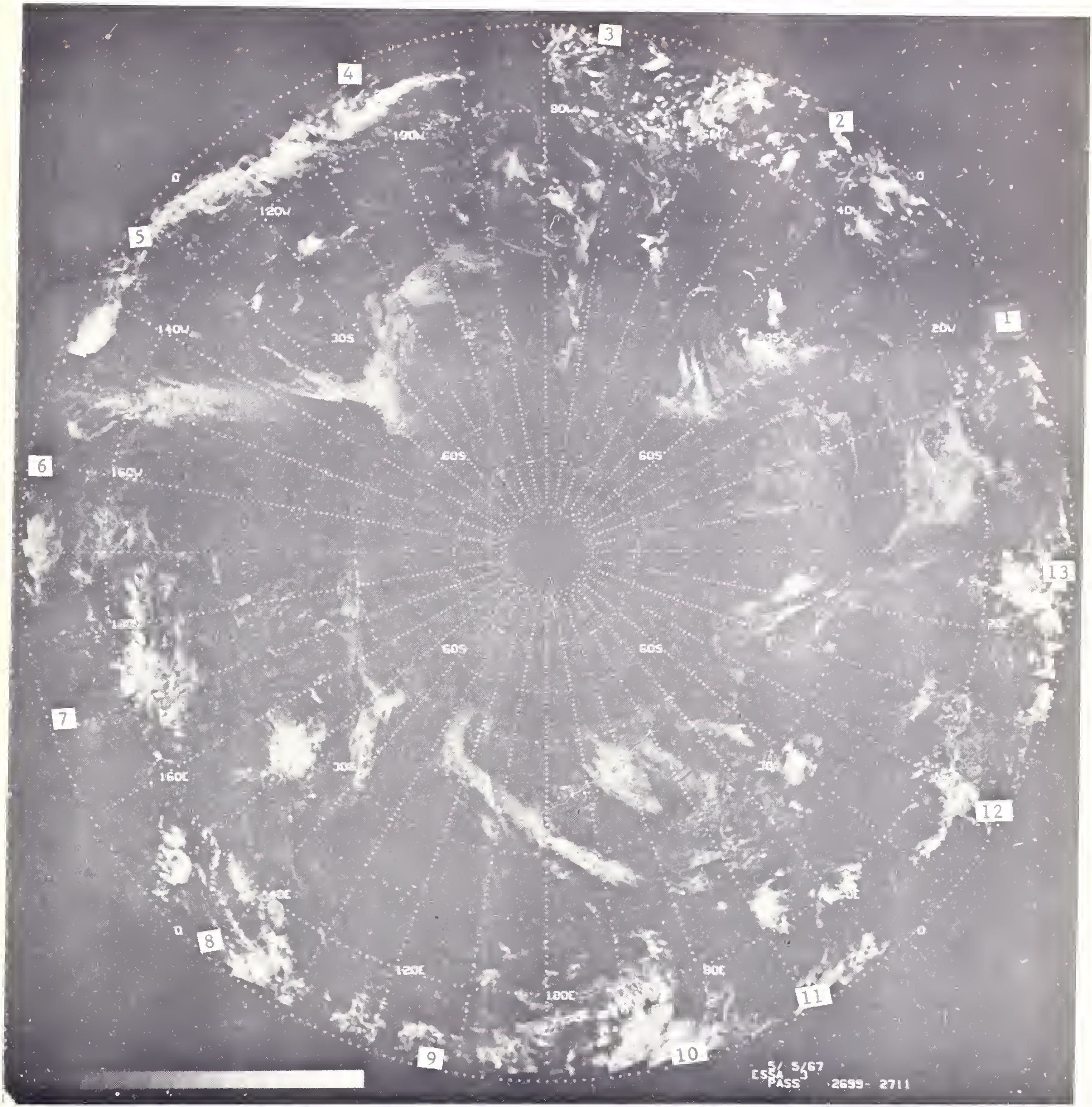
6
7
8
60E
0
20E
60W
60N
30N
160W
140W
20W
40W
100W
80W
5/ 5/67
ESSA 3
PASS 2699- 2711


3
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80W
100W
60W
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120W
40W
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140W
30S
30S
20W
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160W
60S
60S
13
60S
60S
20E
7
160E
30S
30S
12
140E
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0
8
120E
80E
60E
11
100E
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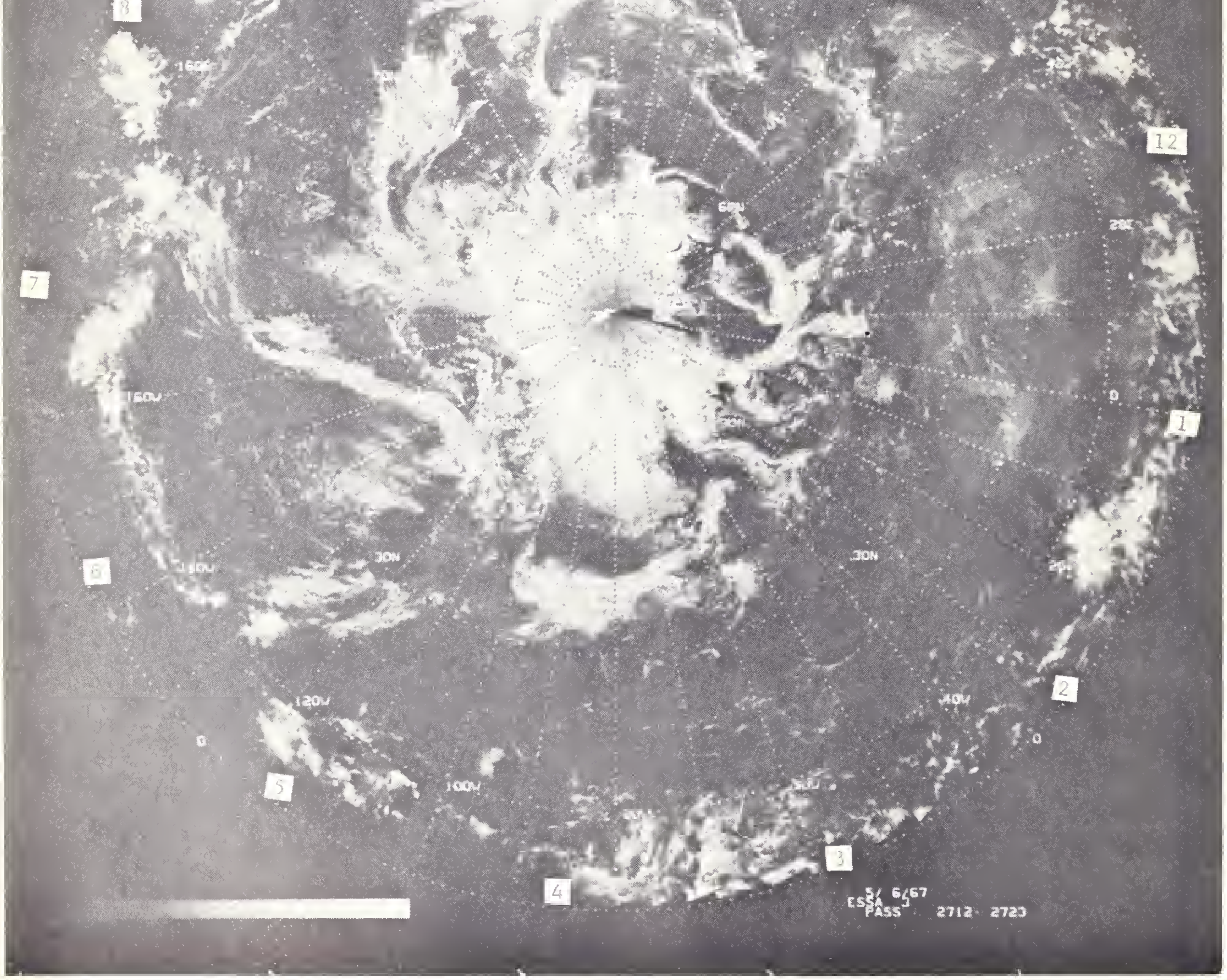
10
5/ 5/67
ESSA 3
PASS 2699- 2711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60E
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60N
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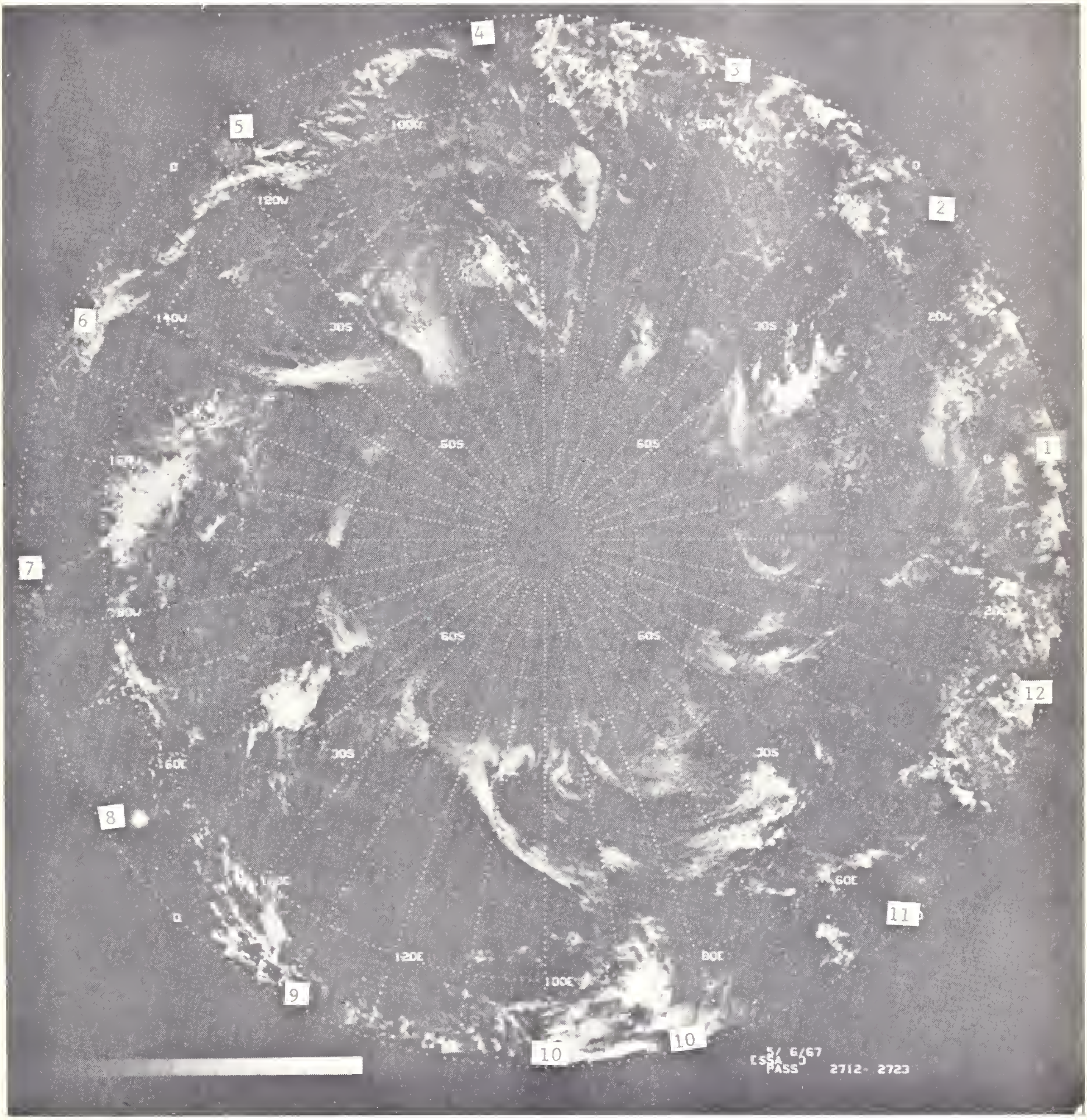
30N
30N
120W
100W
40W
2
5
3
4
5/ 6/67
ESSA 3
PASS 2712 2723


4
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100W
80W
60W
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120W
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140W
30S
30S
20W
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160W
60S
60S
0
7
180W
60S
60S
20E
12
160E
30S
30S
8
140E
60E
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0
120E
100E
80E
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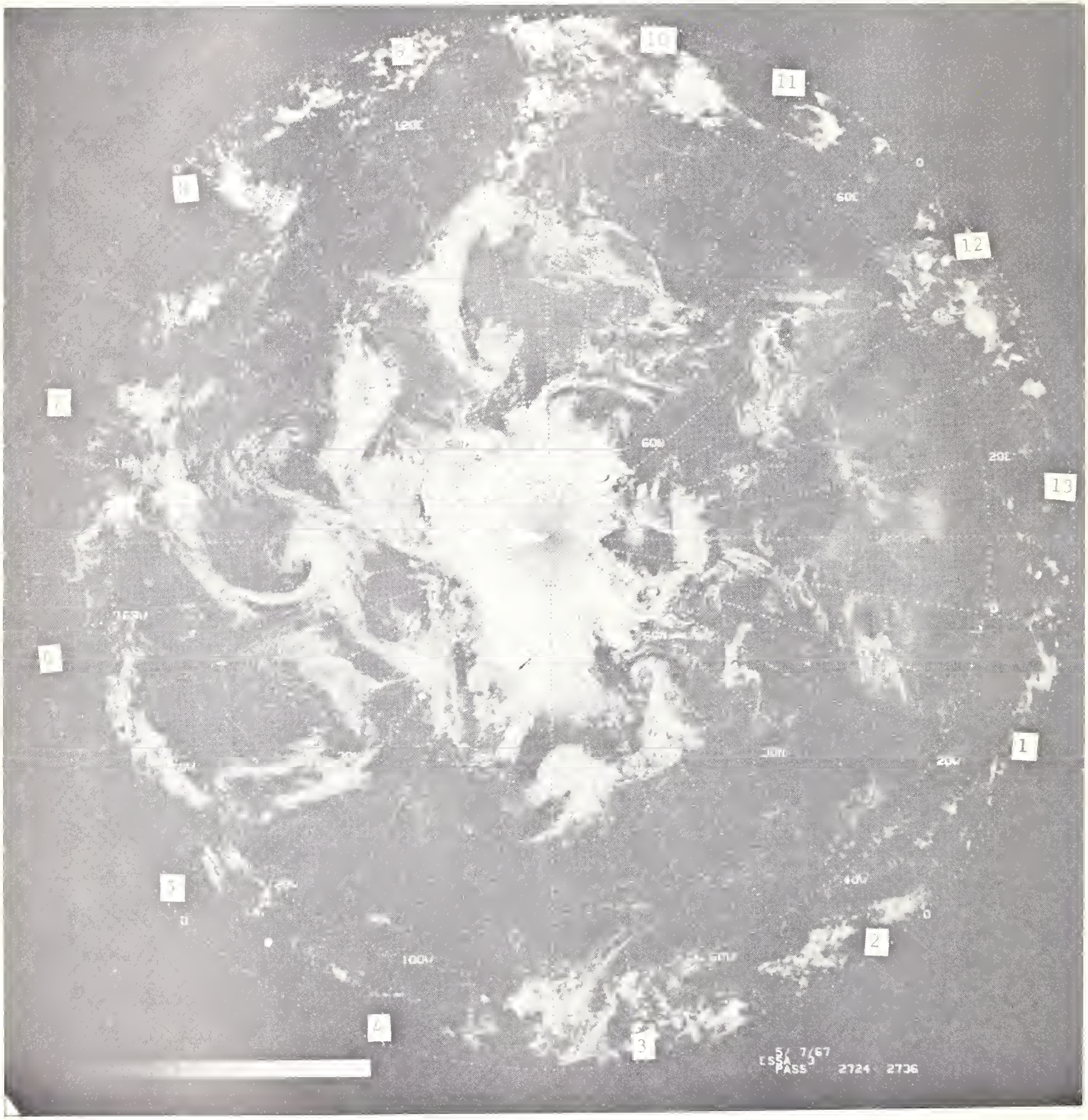
5/ 6/67
ESSA 5
PASS 2712- 2723


9
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13
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8
120E
60E
20E
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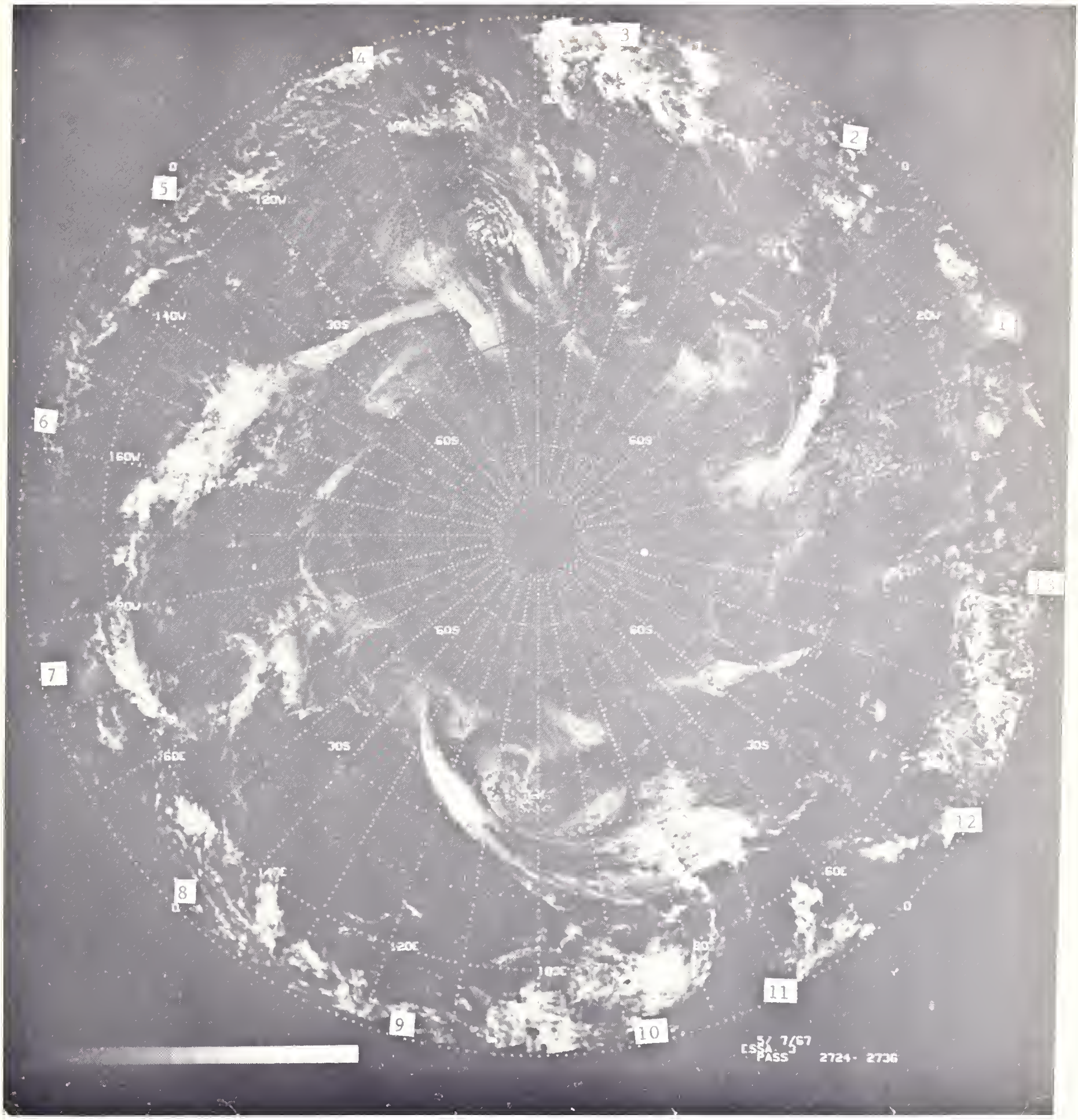
60N
20W
40W
100W
5/ 7/67
ESSA 3
PASS 2724 2736


1
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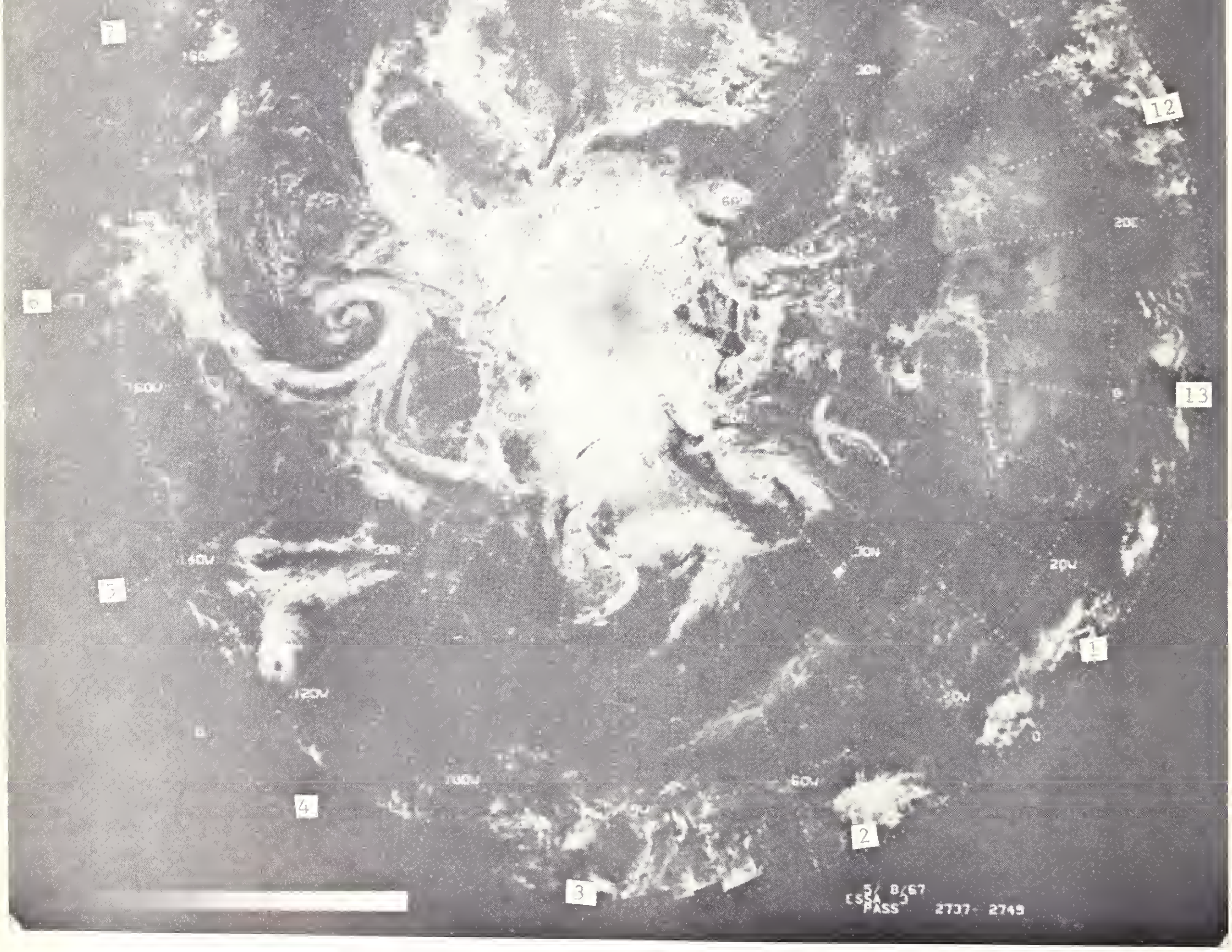
120W
140W
160W
160E
140E
120E
180E
80E
60E
20W
30S
60S
5/ 7/67
ESSA 3
PASS 2724- 2736


9
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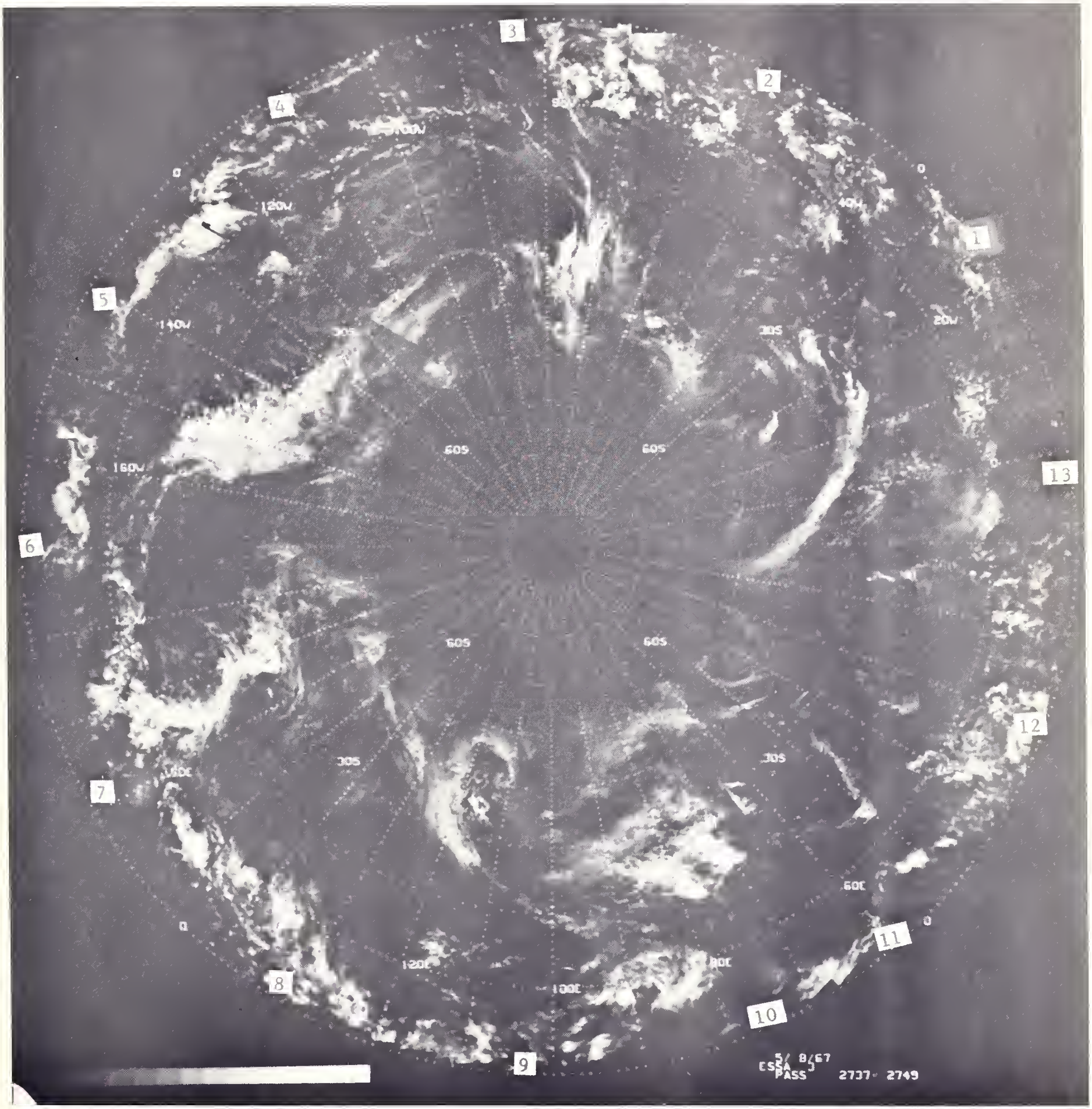
120E
140E
160E
60E
30N
60N
20E
160W
140W
120W
100W
60W
30N
20W
0
5/ 8/67
ESSA 3
PASS 2737- 2749


3
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9
100W
120W
140W
160W
20W
40W
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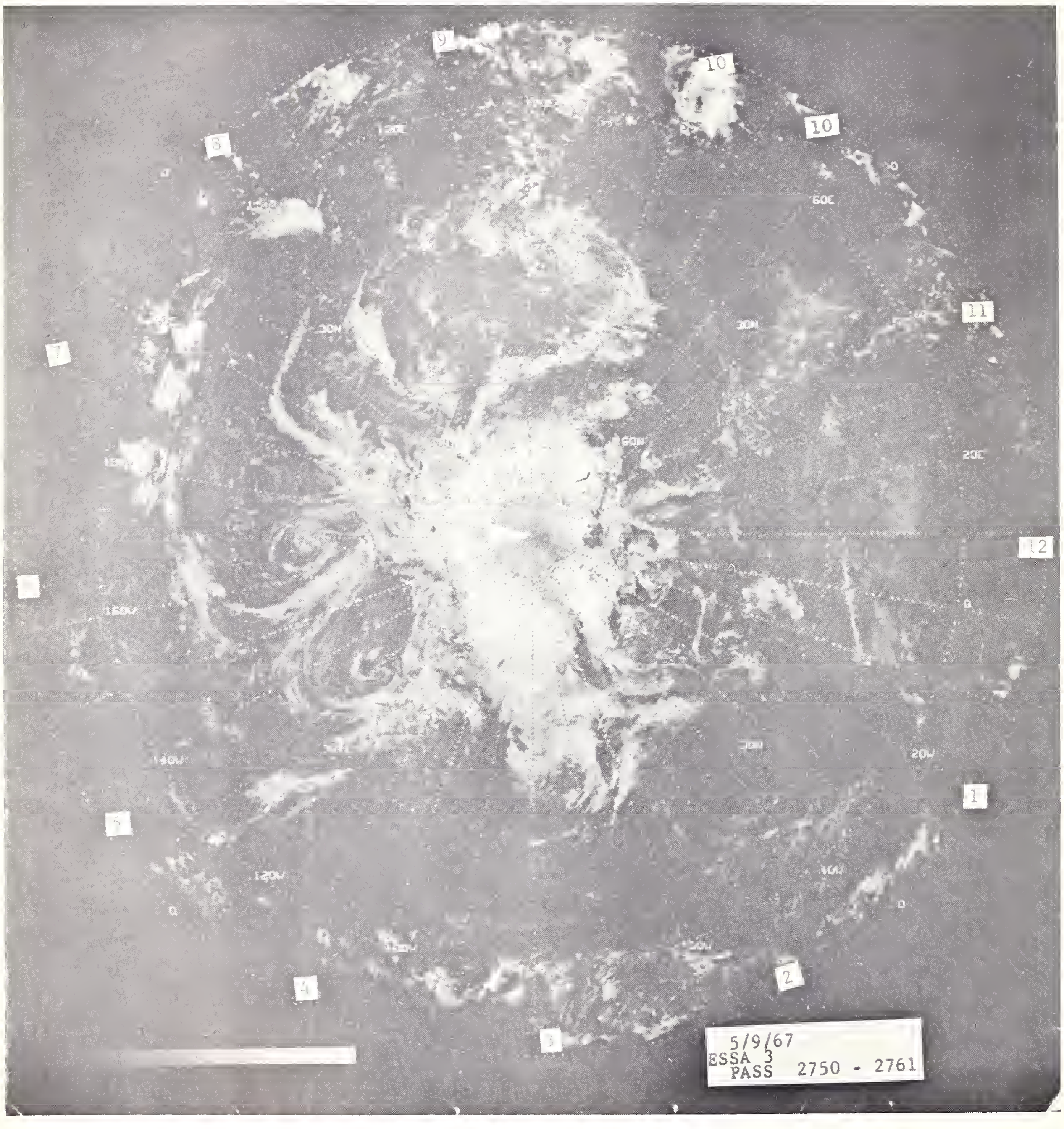
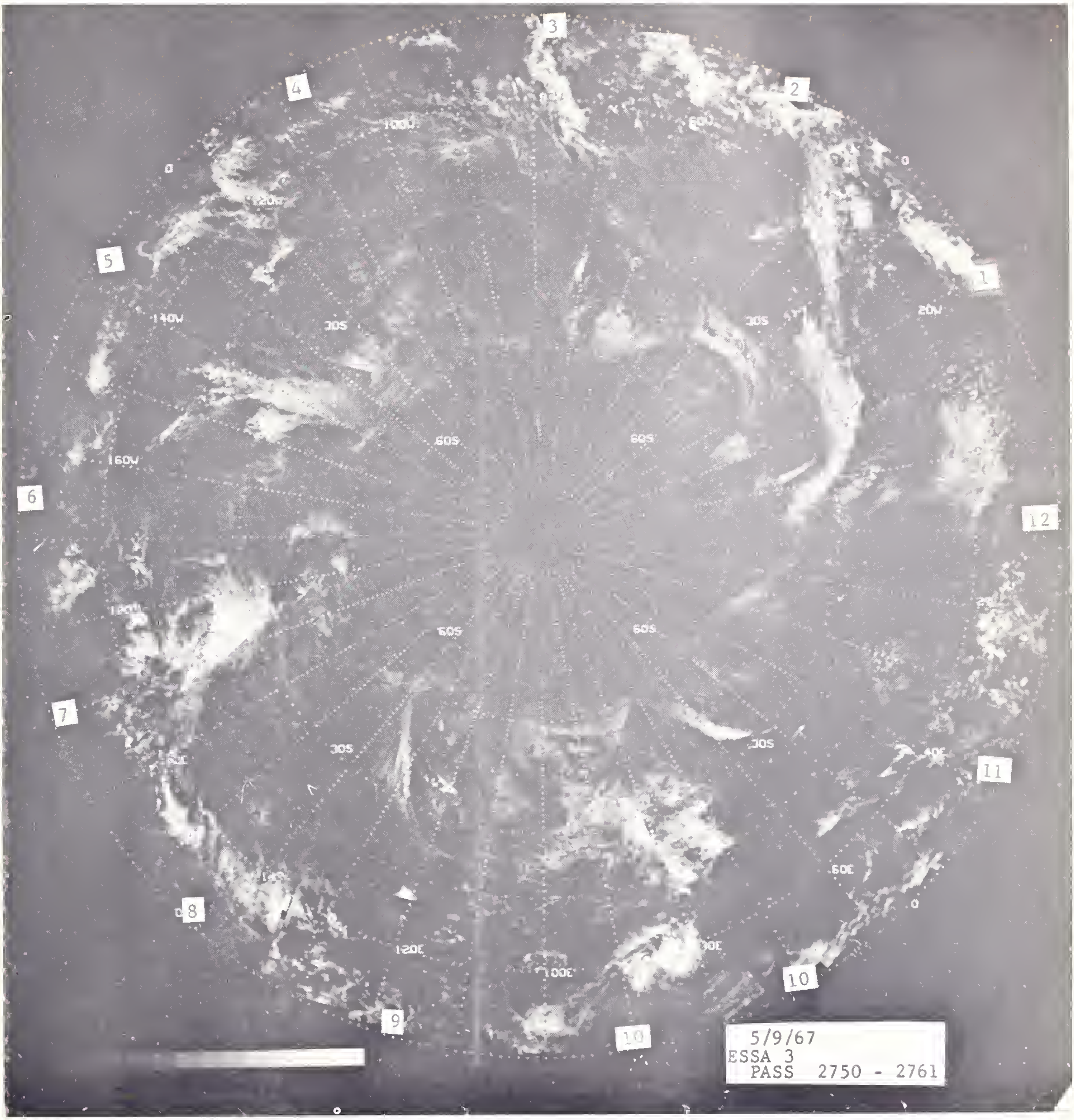
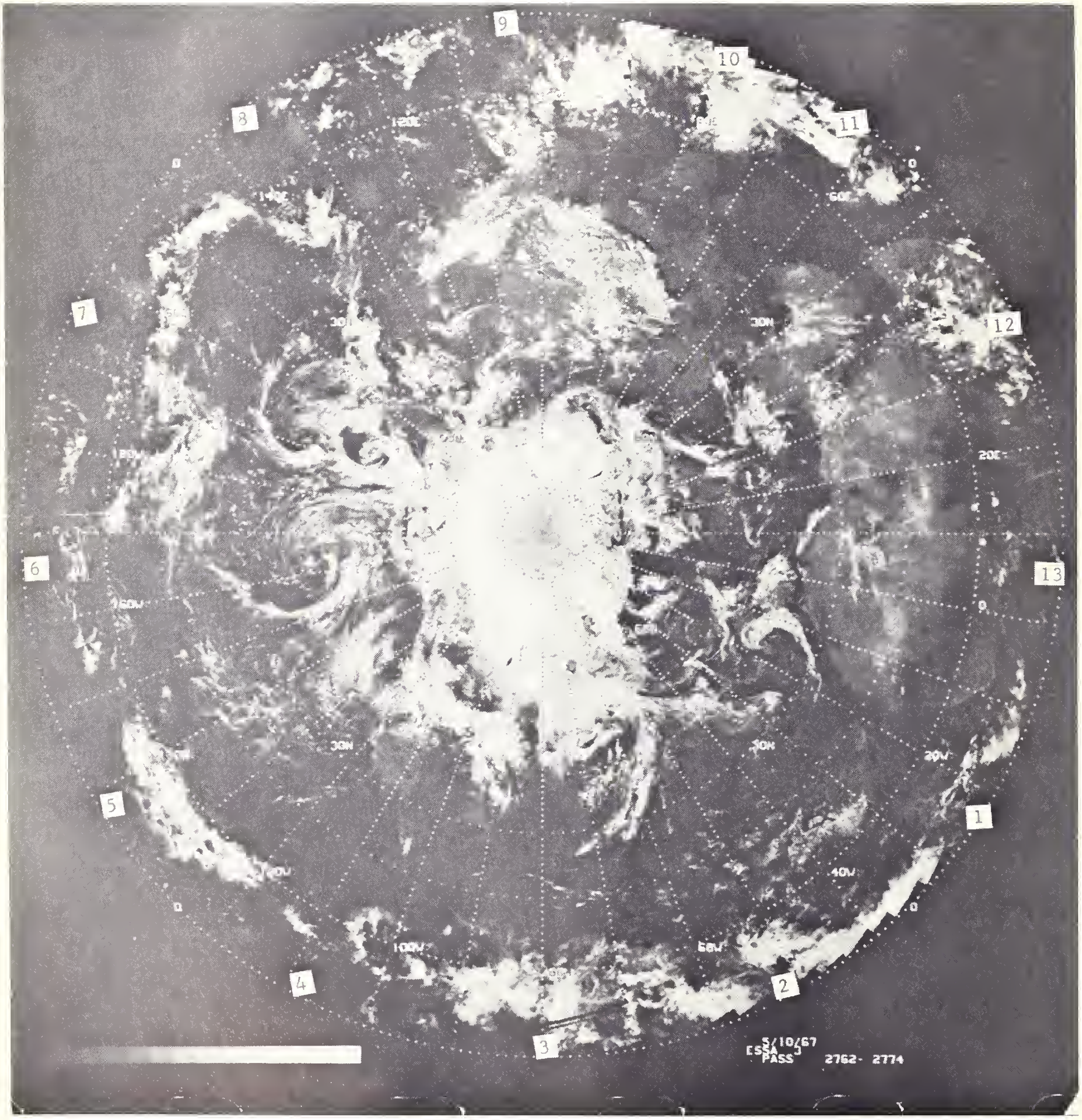
30S
60S
120E
100E
80E
160E
5/ 8/67
ESSA 3
PASS 2737- 2749


9
10
10
8
120E
150E
0
140E
60E
0
7
30N
30N
11
60N
60N
20E
12
160W
0
30N
140W
30N
20W
1
6
120W
40W
0
100W
20W
4
2
3
5/9/67
ESSA 3
PASS 2750 - 2761


3
4
2
100W
60W
0
0
120W
5
1
140W
30S
30S
20W
60S
60S
160W
6
12
180W
60S
60S
7
30S
30S
40E
11
8
60E
0
120E
30E
100E
10
9
10

5/9/67
ESSA 3
PASS 2750 - 2761


9
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11
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120E
80E
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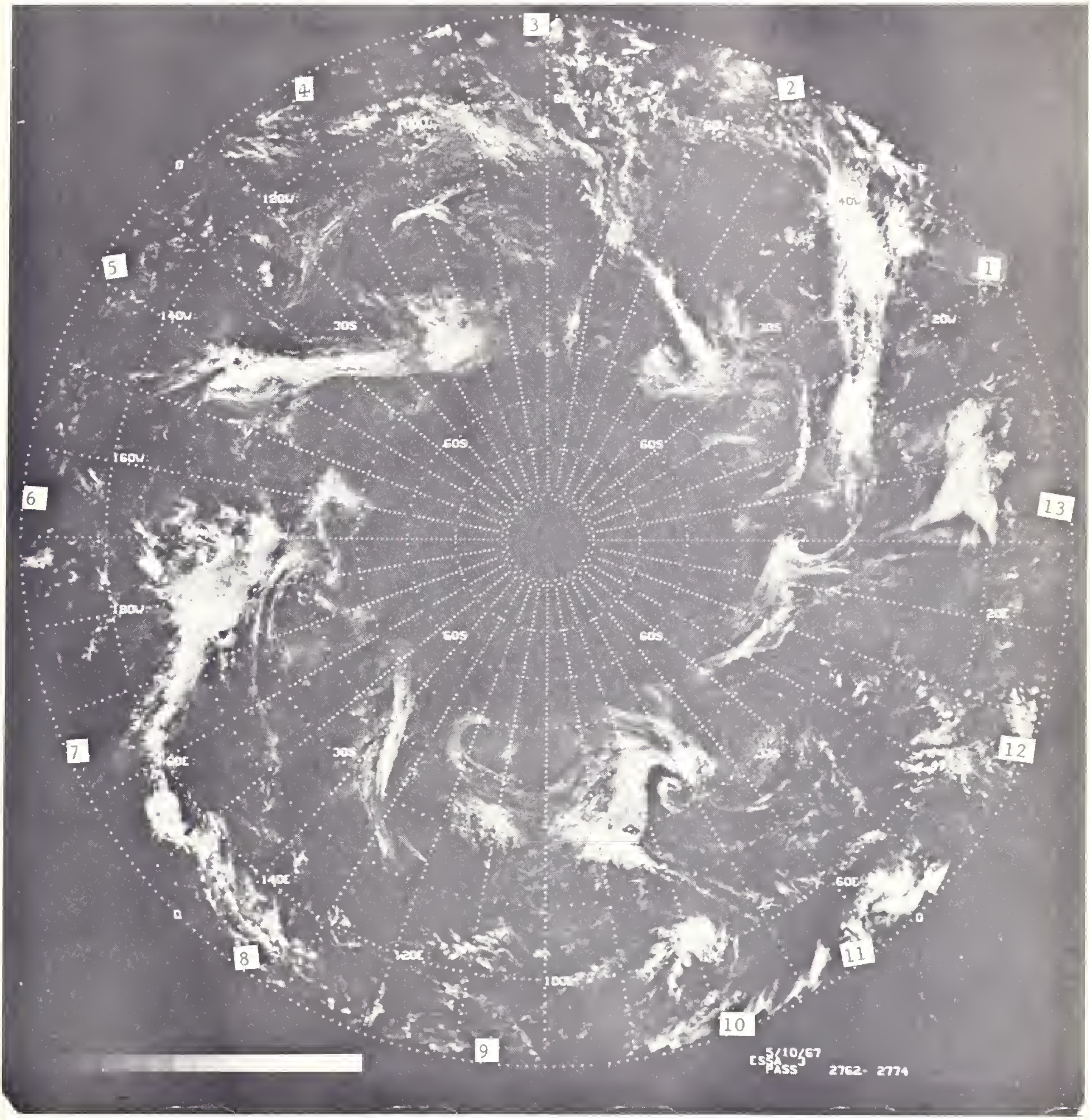
140E
60E
7
30N
30N
12
180W
20E
6
13
160W
0
30N
30N
20W
5
1
40W
0
0
100W
60W
4
2
3
5/10/67
ESSA 3
PASS 2762- 2774


3
4
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80W
100W
60W
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120W
40W
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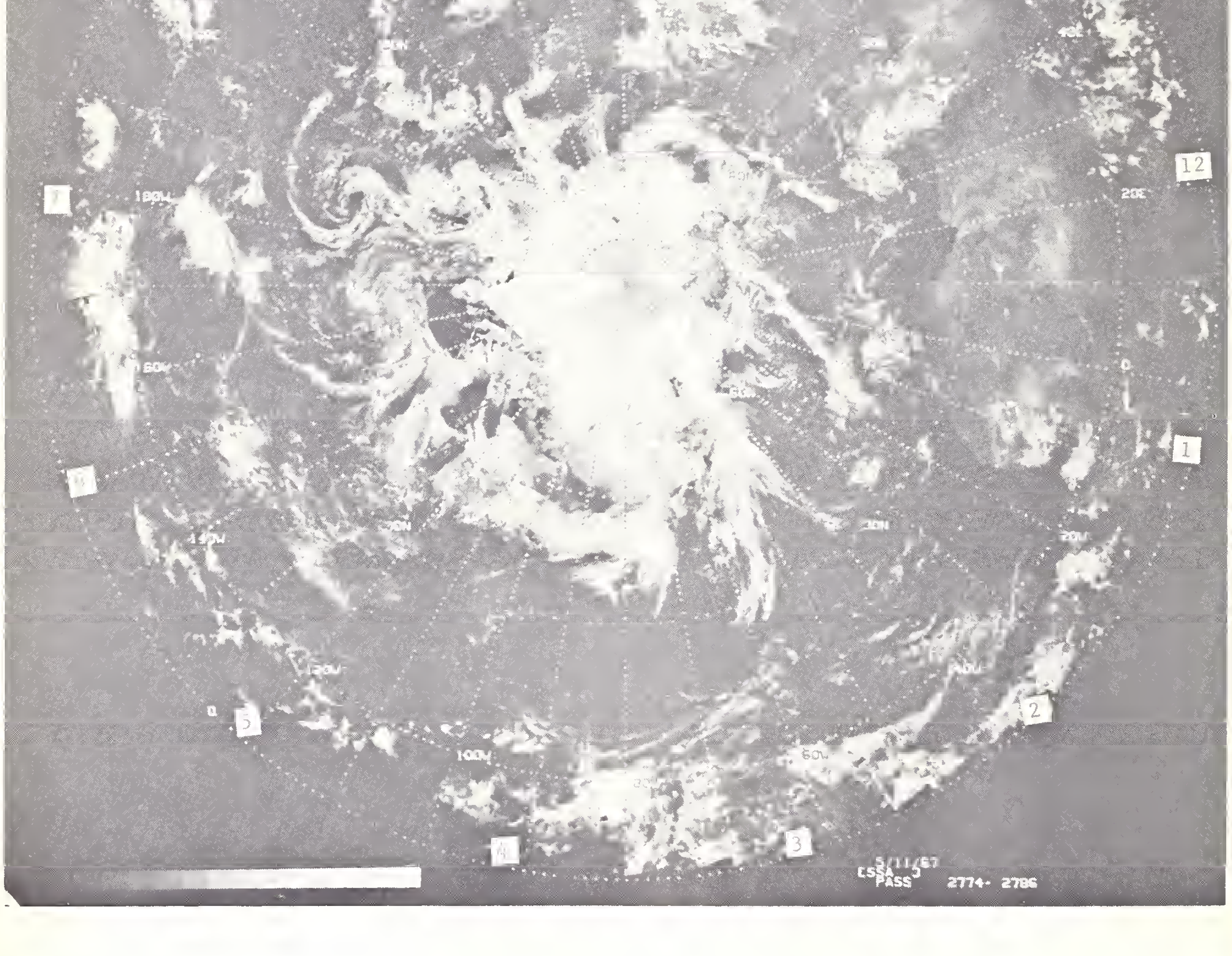
140W
30S
30S
20W
160W
60S
60S
6
13
180W
20E
60S
60S
7
160E
30S
30S
12
140E
60E
0
0
8
11
120E
100E
10
9
5/10/67
ESSA 3
PASS 2762- 2774

10
9
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120E
140E
0
60E
11
8
160E
40E
12
7
180W
20E
160W
0
1
6
140W
30N
30N
20W
120W
40W
0
5
2
100W
60W
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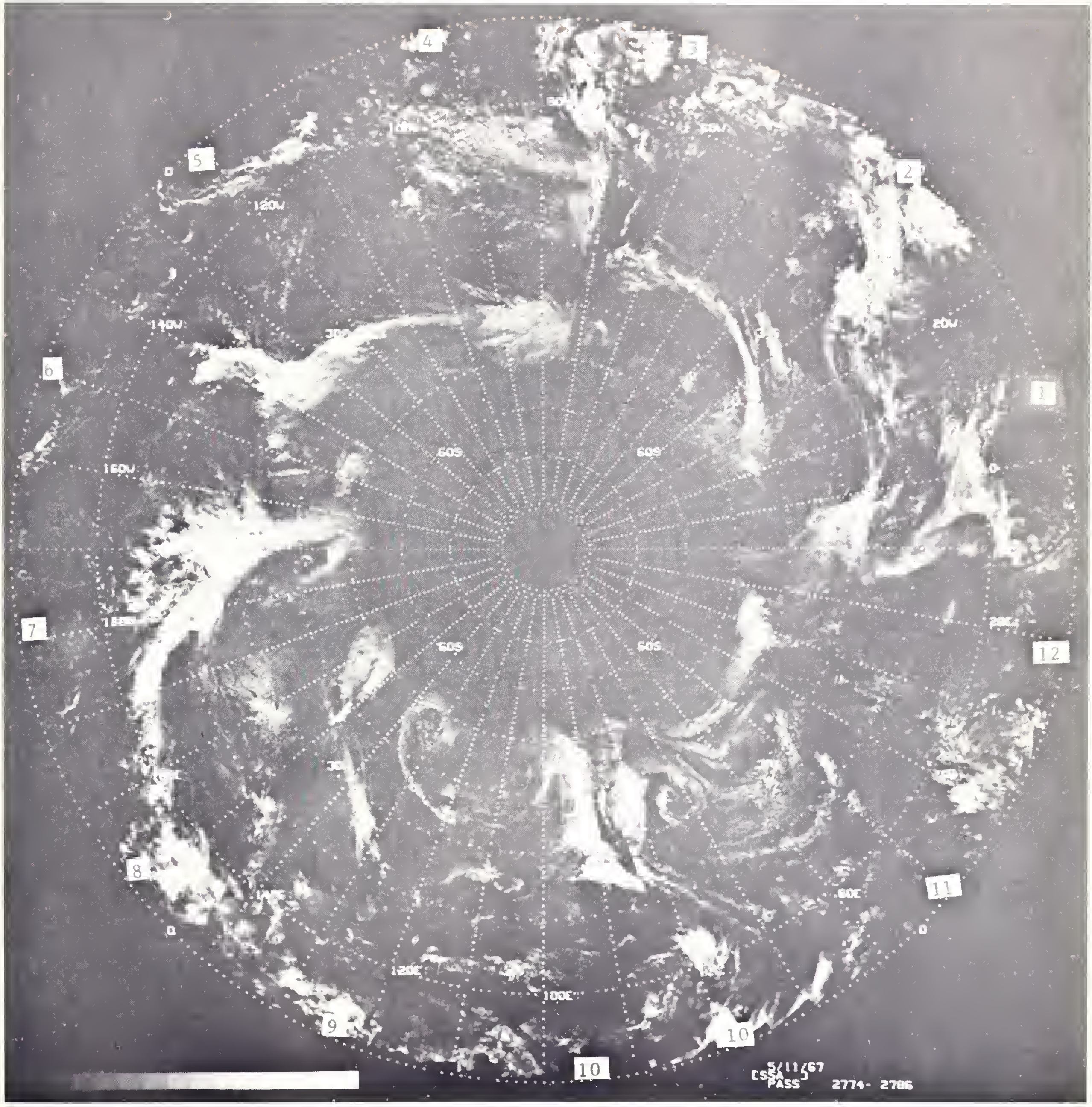
3
5/11/67
ESSA 3
PASS 2774- 2786


4
3
80W
100W
60W
5
0
120W
2
140W
30S
20W
6
1
60S
60S
160W
0
7
180
20E
12
60S
60S
30S
8
140E
80E
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0
0
120E
100E
9
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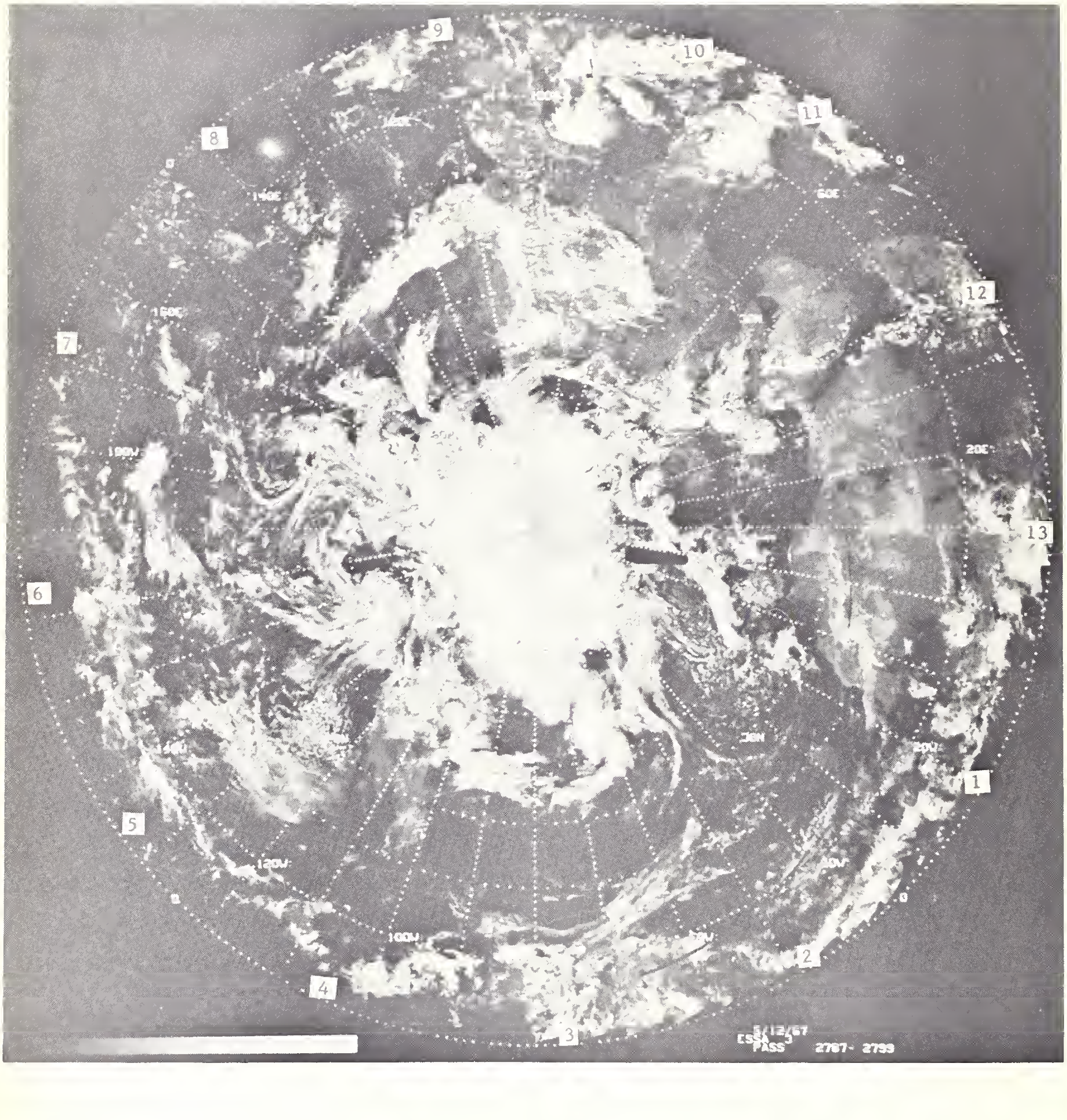
10
5/11/67
ESSA 3
PASS 2774- 2786


9
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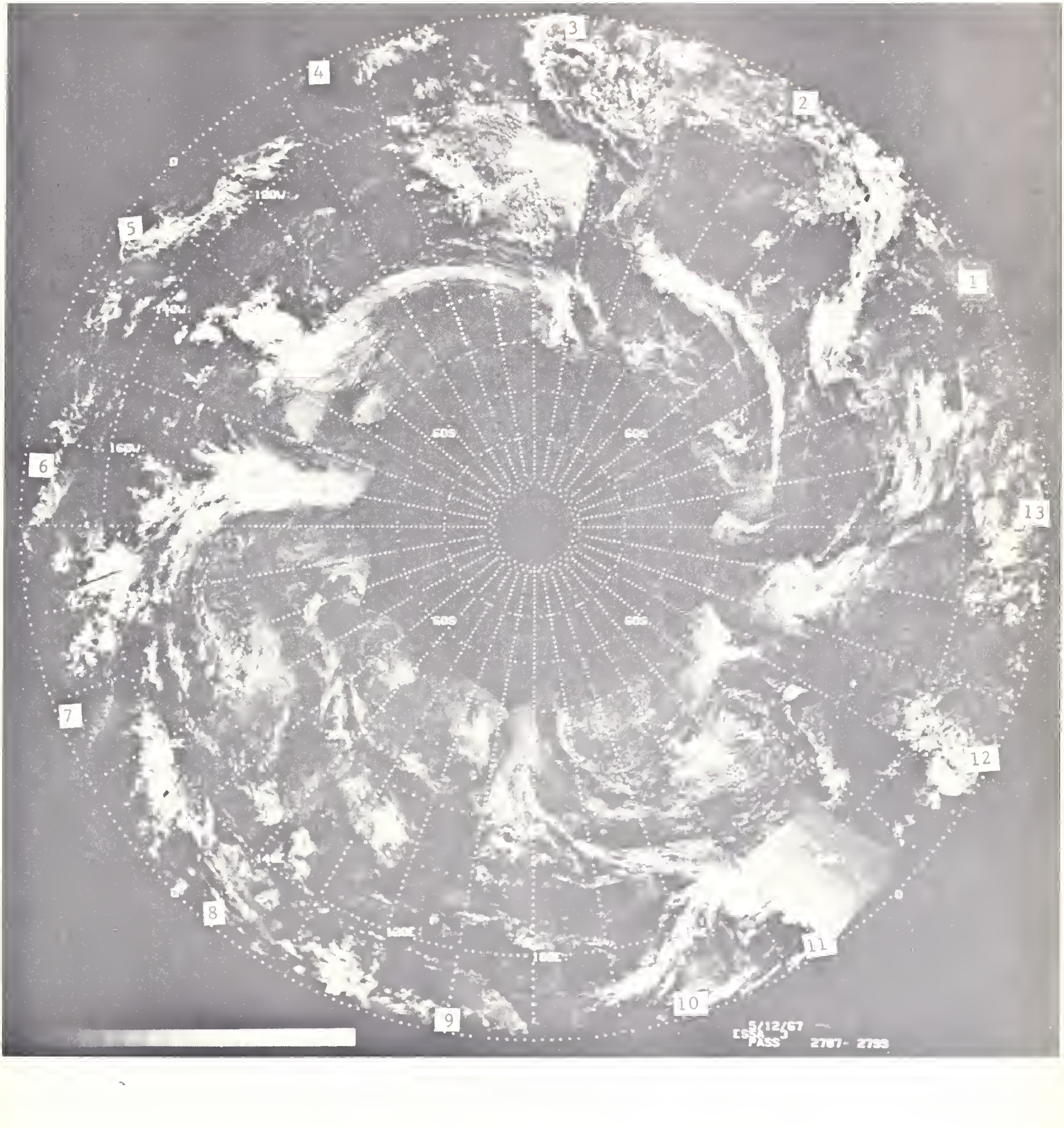
3
100E
120E
140E
160E
60E
0
20E
180W
160W
140W
120W
100W
80W
60W
40W
20W
30N
5/12/67
ESSA 3
PASS 2787- 2799


3
4
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100W
120W
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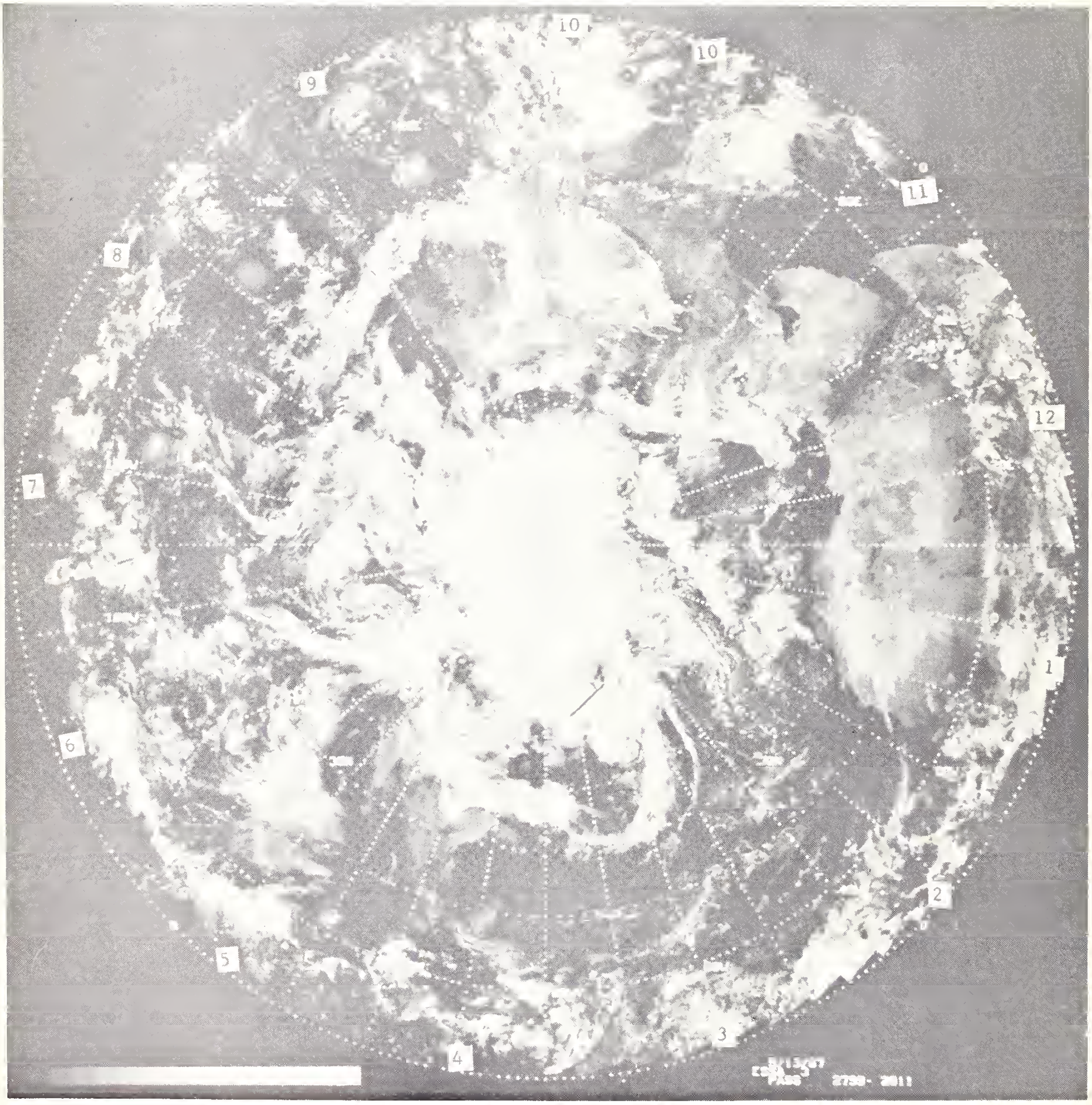
1
140W
20W
60S
60S
160W
6
13
60S
60S
7
12
140E
8
120E
180E
11
10
9
5/12/67
ESSA 3
PASS 2787- 2799



10
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11
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12
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1
6
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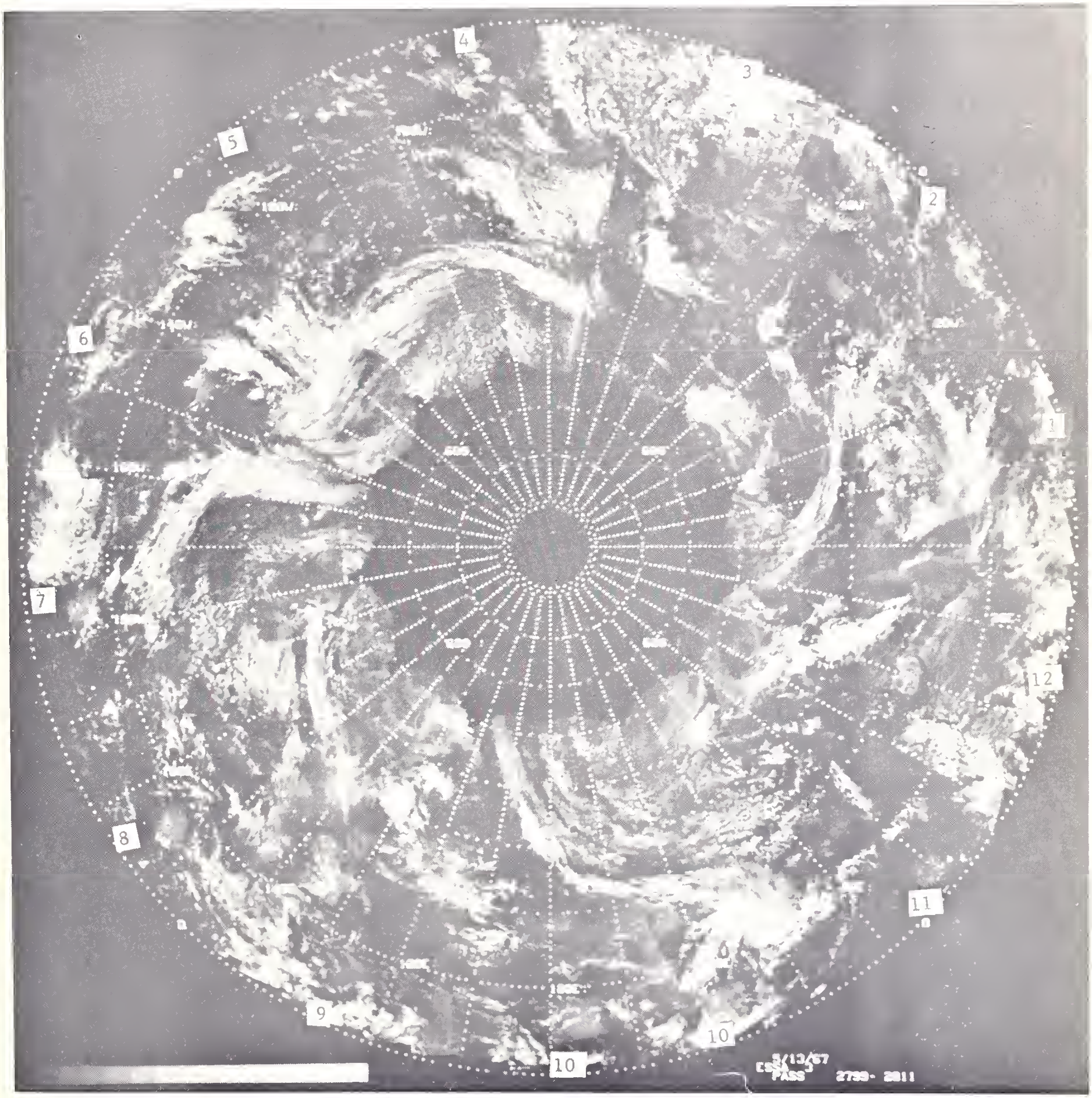
4
5/15/67
ESSA 3
PASS 2758- 2811


4
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6
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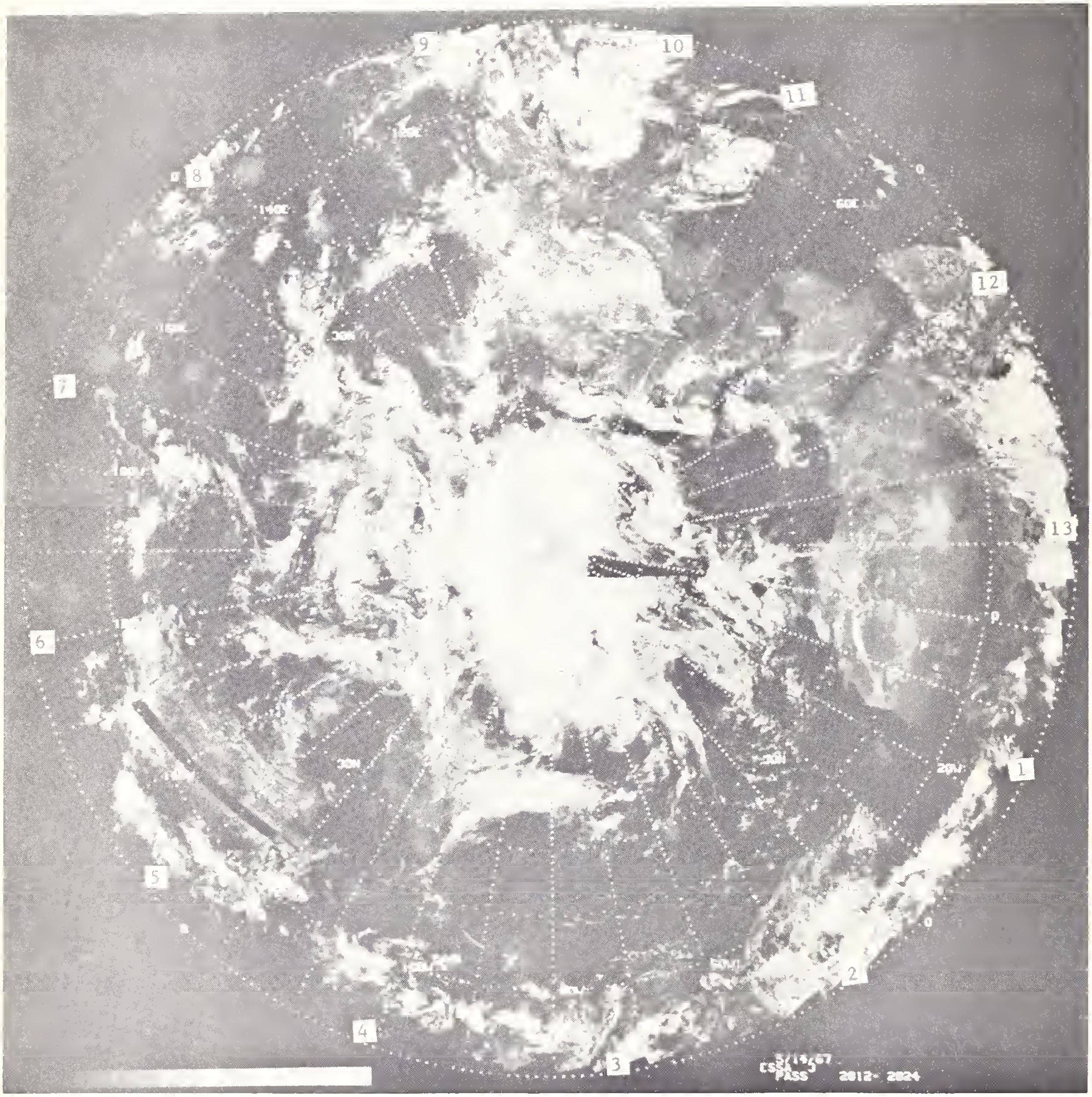
12
8
11
9
10
10
5/13/67
ESSA 3
PASS 2799- 2811


9
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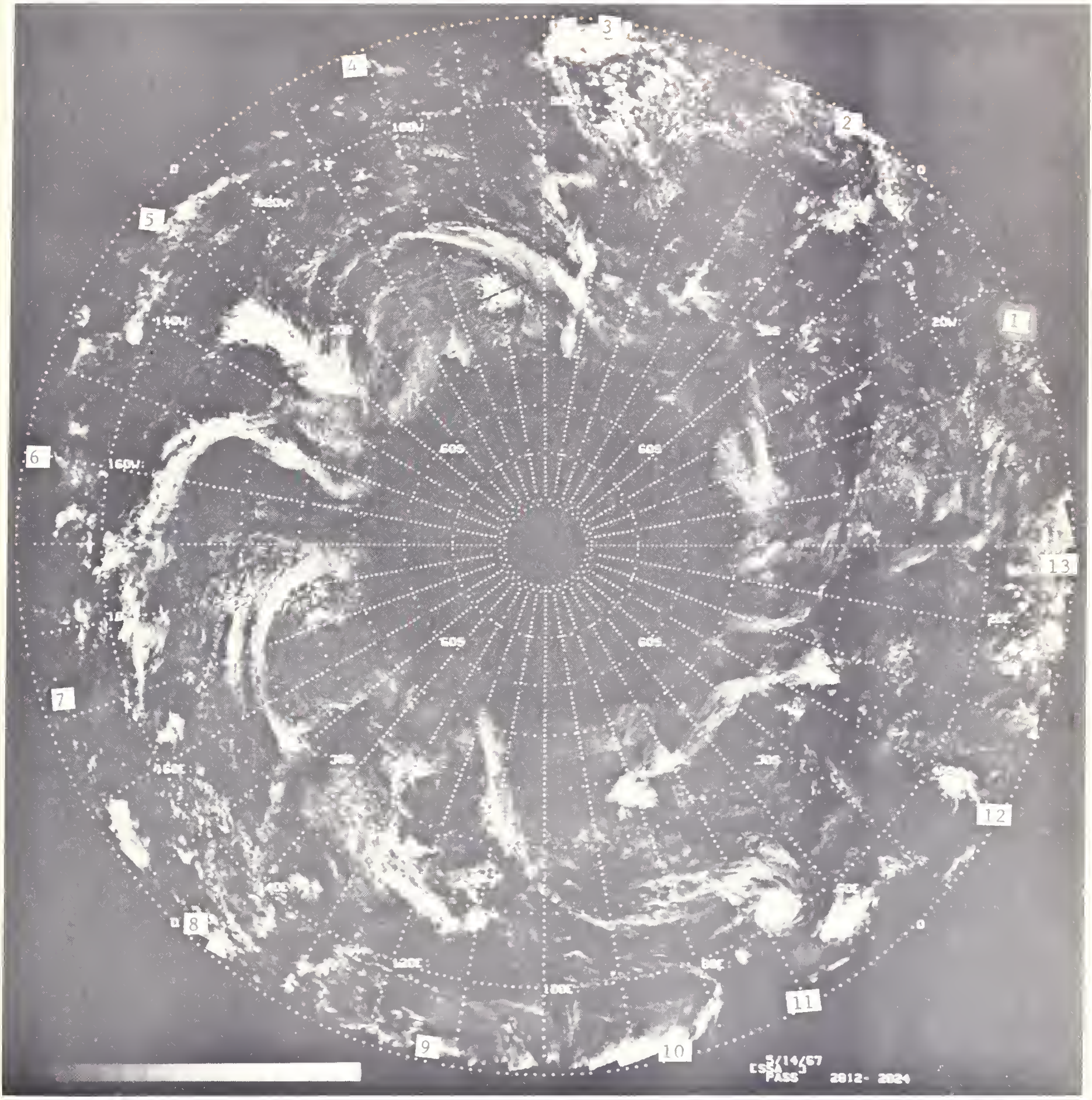
140E
0
60E
12
30N
7
13
6
0
1
30N
20W
30N
5
2
4
3
5/14/67
ESSA 5
PASS 2012- 2024


3
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100W
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120W
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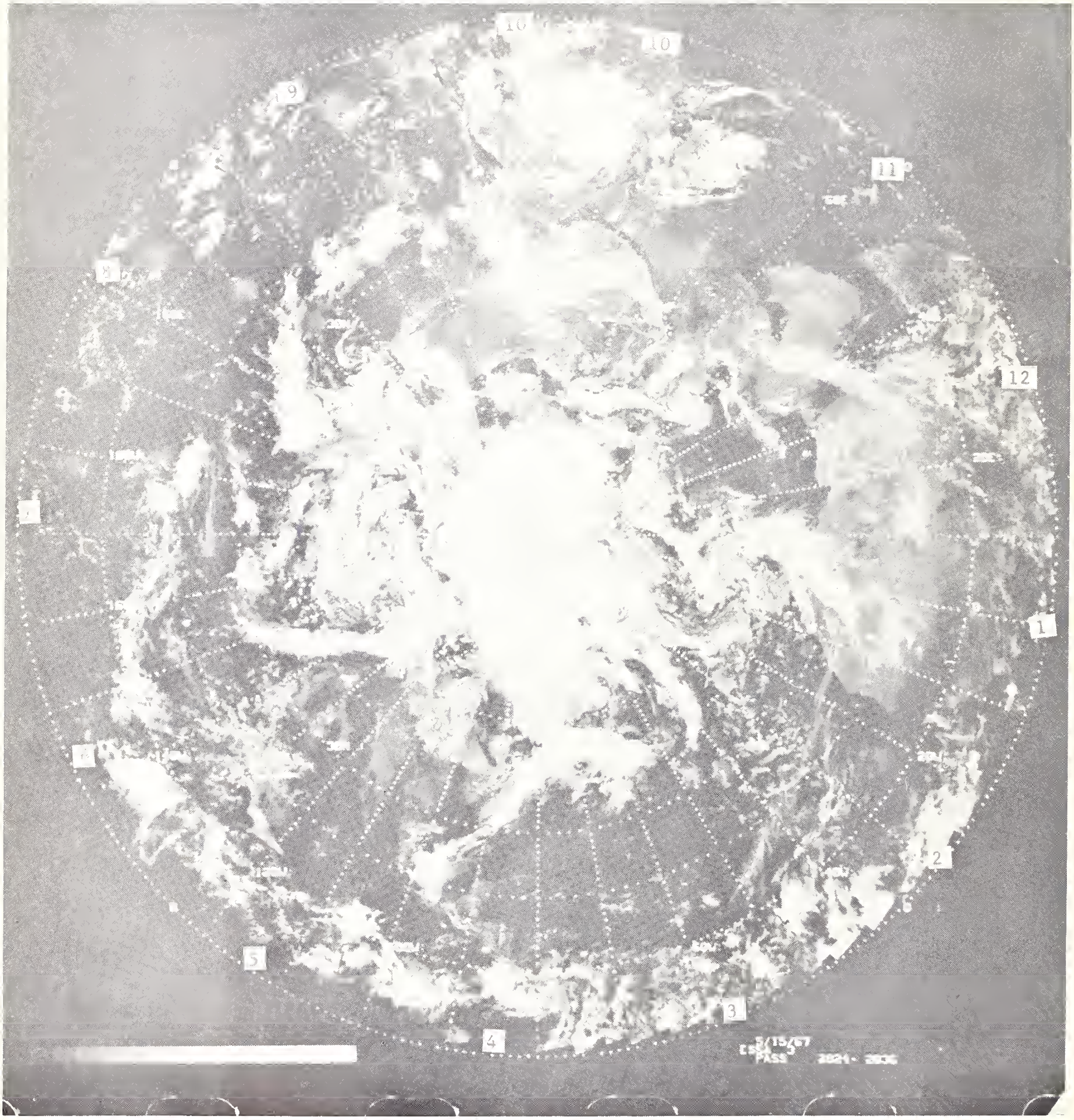
140W
20W
30S
30S
6
160W
60S
60S
13
20E
60S
60S
7
30S
30S
160E
12
140E
8
60E
0
120E
80E
100E
11
9
10
5/14/67
ESSA 3
PASS 2012- 2024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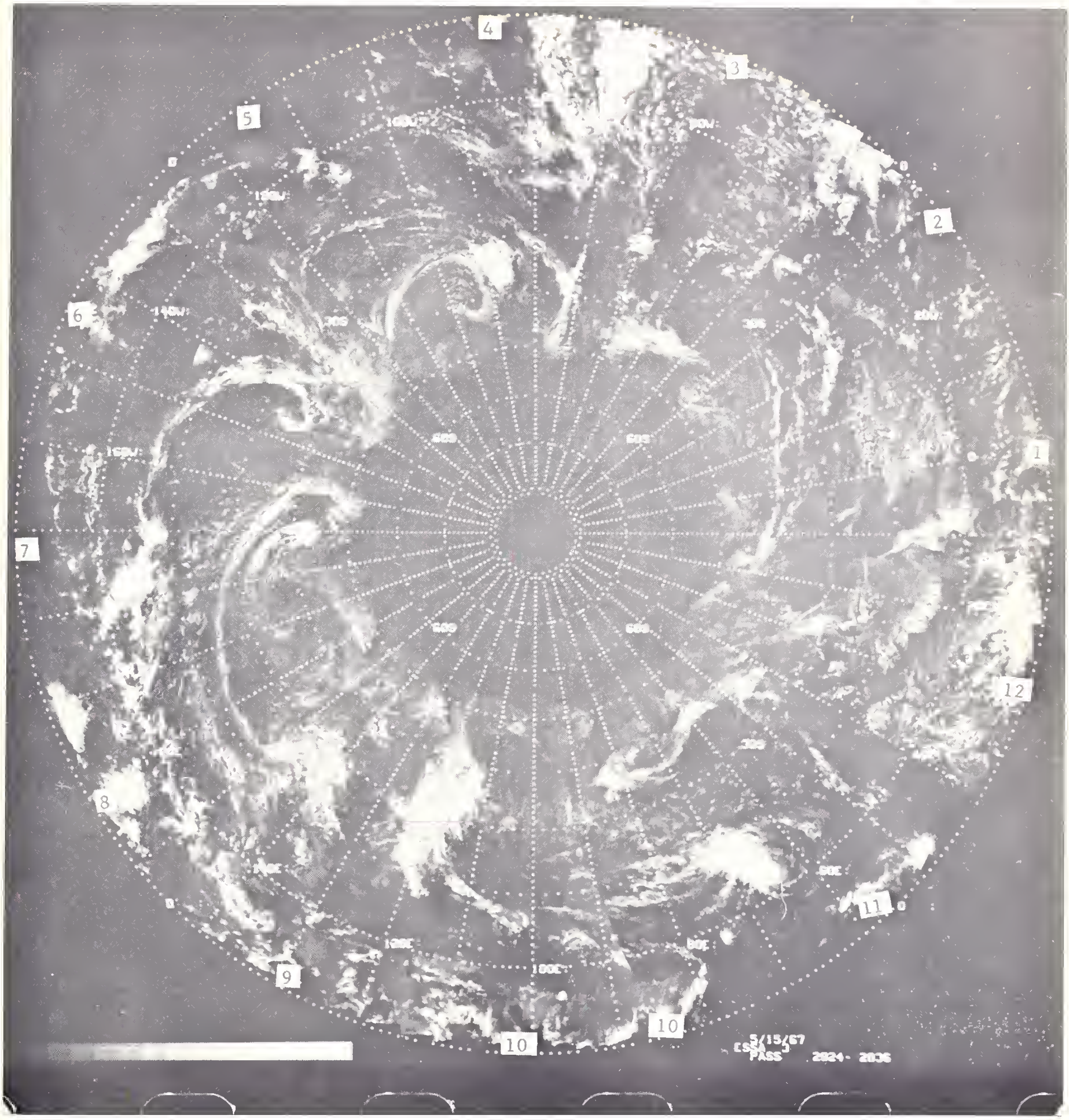
3
4
5/15/67
ESSA 5
PASS 2024- 2036


4
3
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100W
80W
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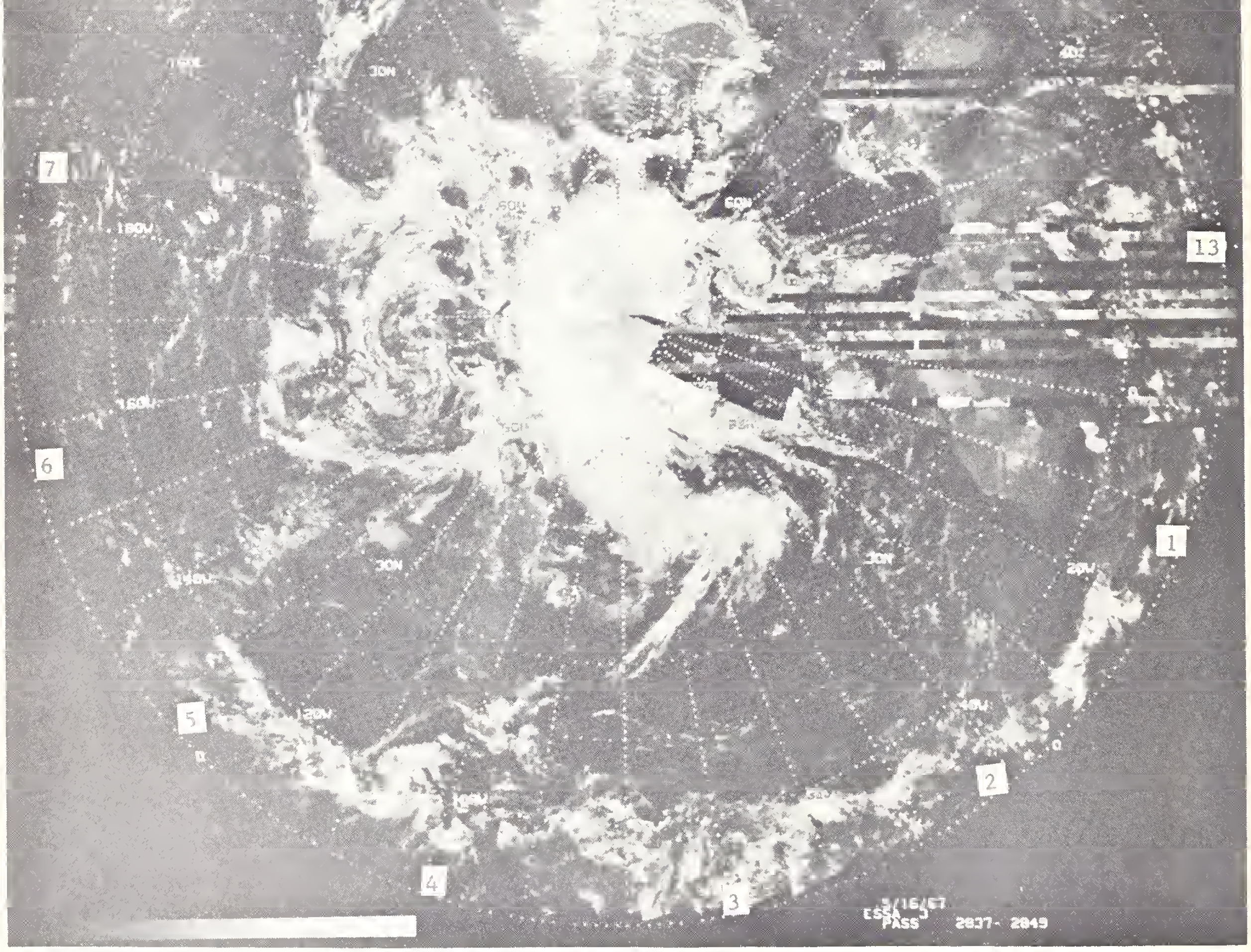
120W
2
6
140W
30S
30S
20W
60S
60S
1
160W
7
60S
60S
12
30S
8
140E
60E
11
0
0
100E
80E
9
180E
10
10
5/15/67
ESSA 3
PASS 2024- 2036


10
9
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12
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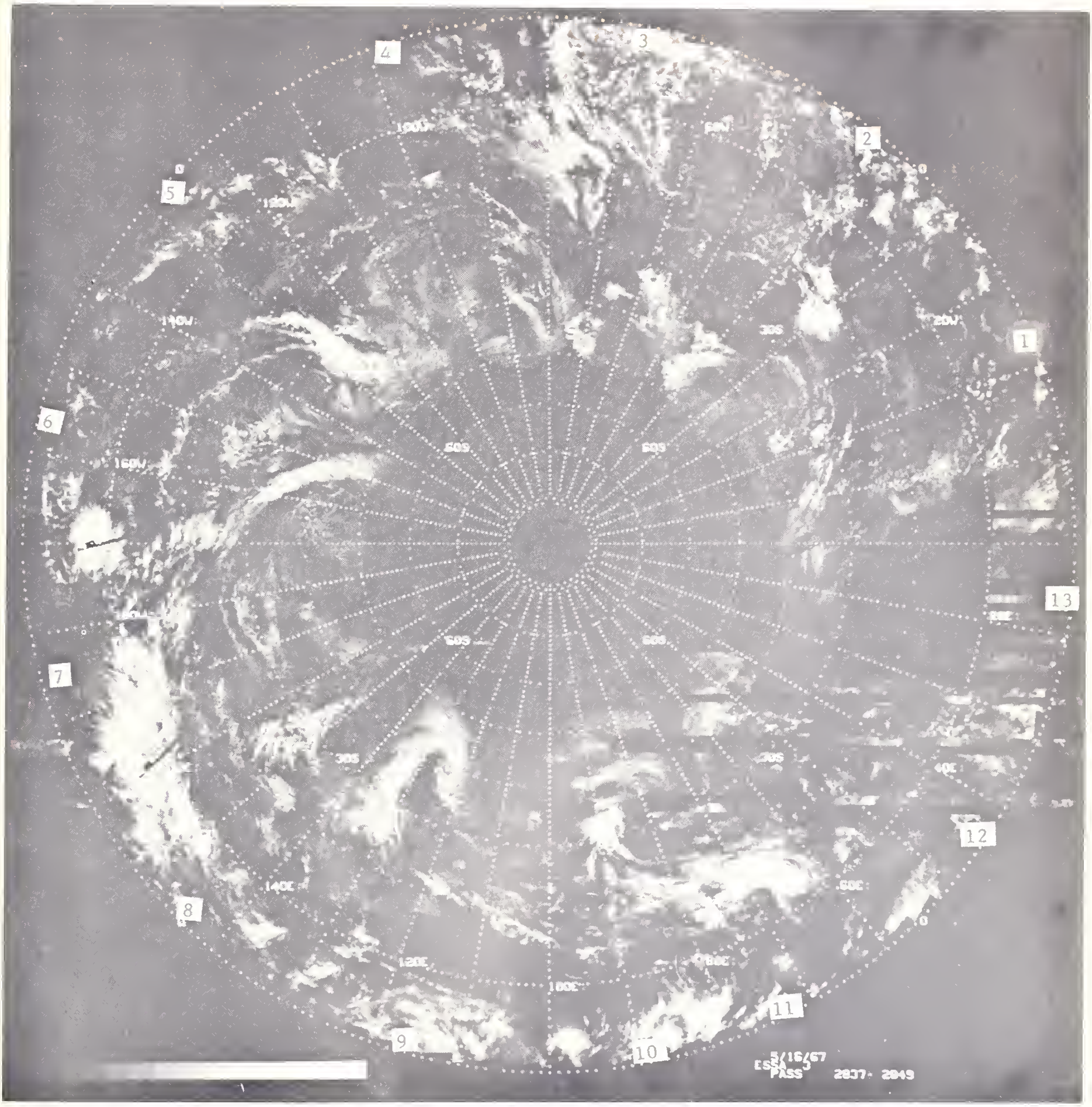
3
120E
60E
30N
60N
180W
30N
30N
120W
90W
20W
40W
3/16/67
ESSA 3
PASS 2837- 2849


1
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100W
60W
120W
140W
20W
30S
160W
60S
60S
180
20E
60S
60S
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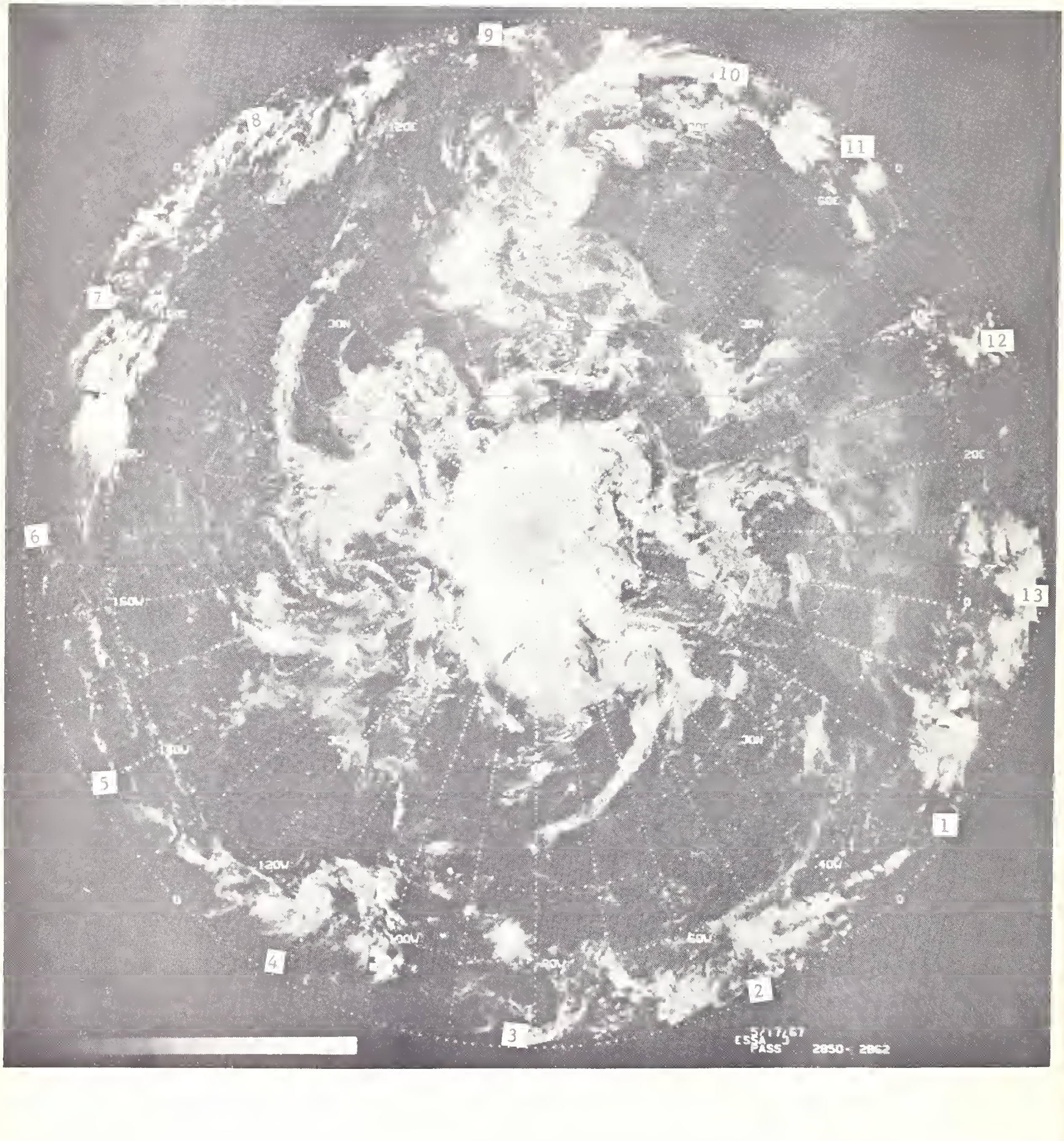
30S
40E
140E
60E
120E
100E
80E
5/16/67
ESSA 3
PASS 2837- 2849


9
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120E
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60E
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30N
30N
12
20E
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160W
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13
30N
30N
5
1
120W
40W
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100W
60W
4
80W
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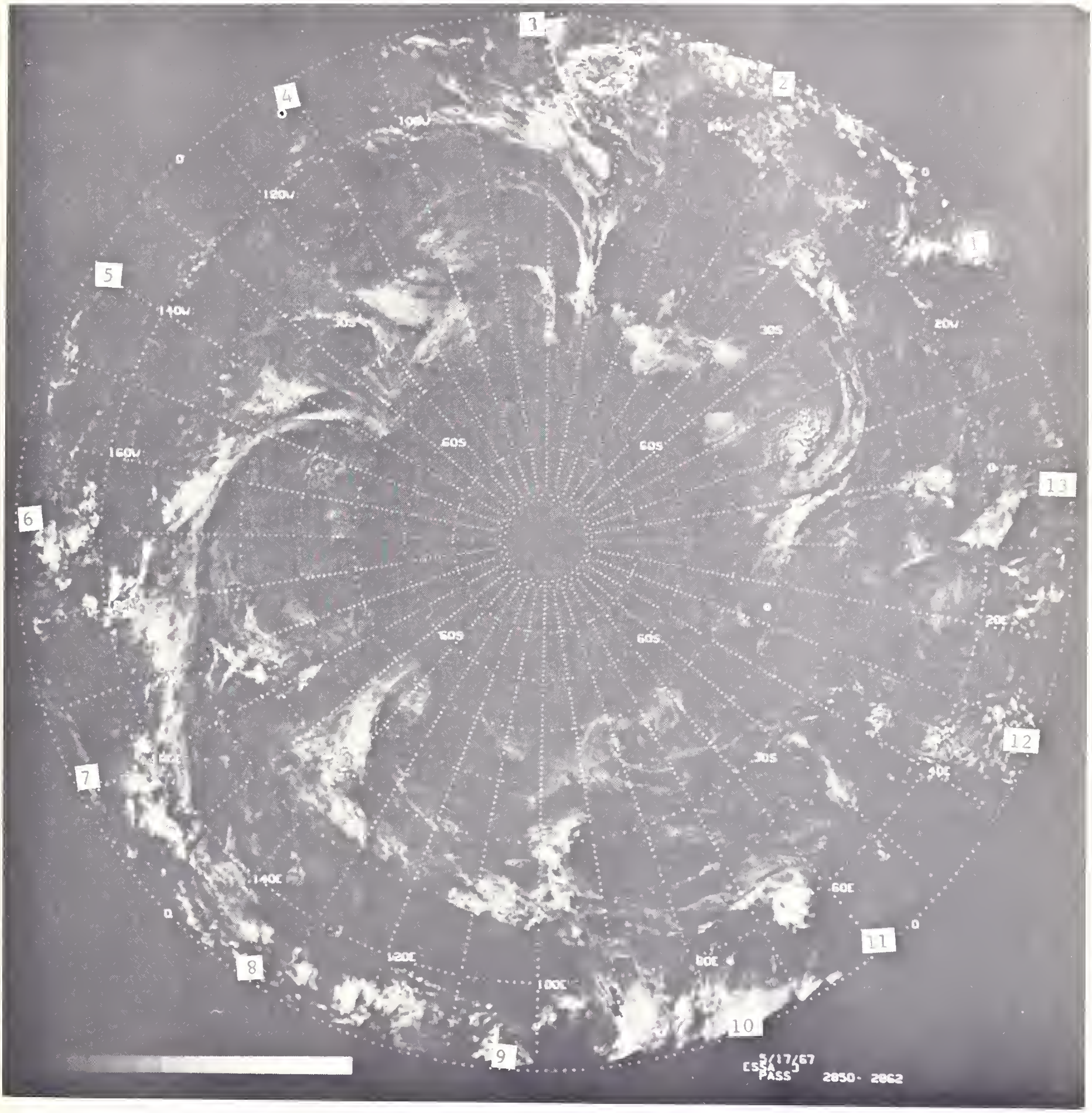
3
5/17/67
ESSA 5
PASS 2850- 2862


3
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100W
80W
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120W
60W
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140W
30S
30S
20W
160W
60S
60S
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20E
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60S
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30S
40E
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140E
60E
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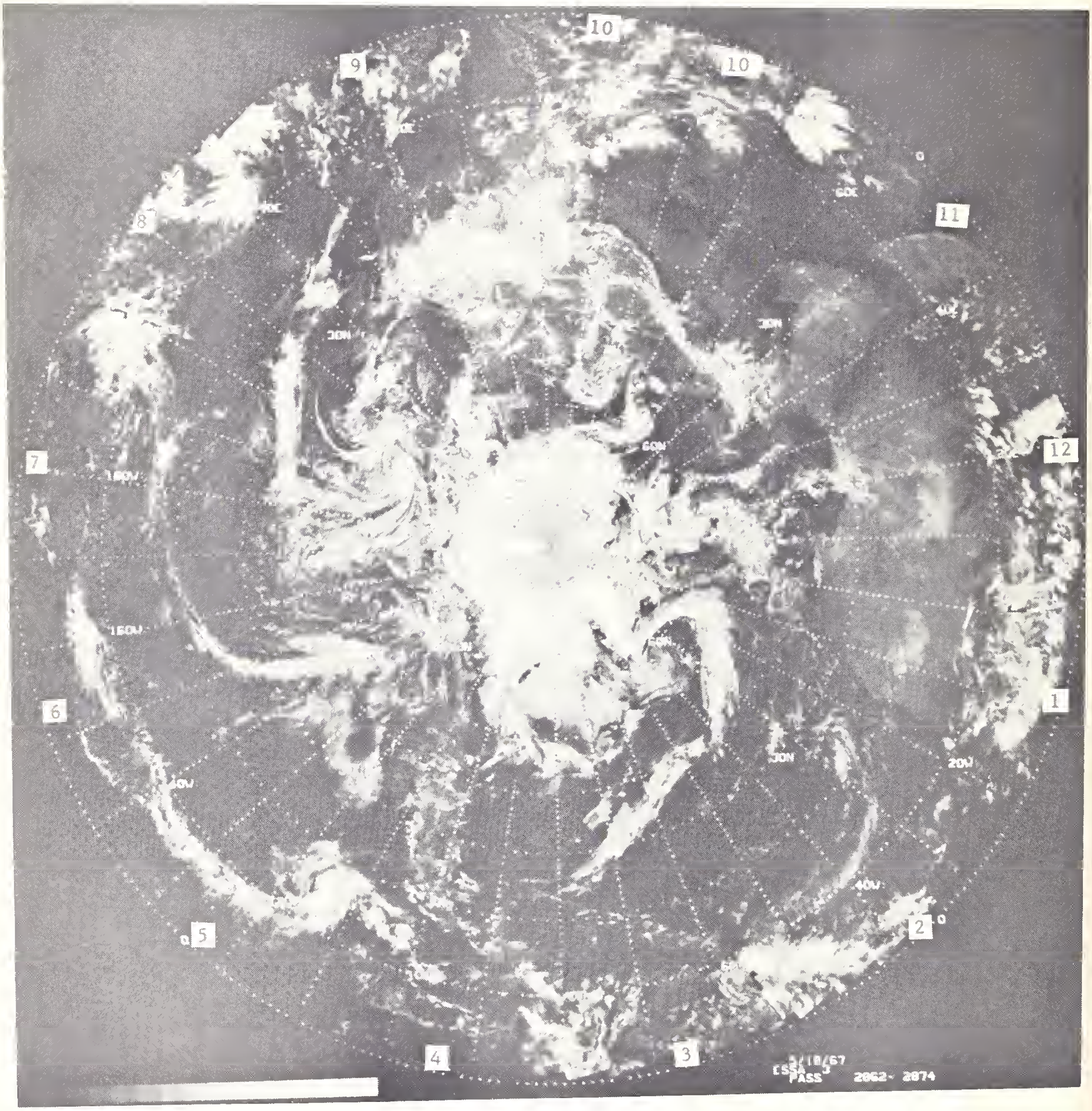
11
8
120E
80E
100E
10
9
5/17/67
ESSA 5
PASS 2850- 2862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60E
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40E
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180W
60N
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160W
60N
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30N
20W
40W
40W
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2
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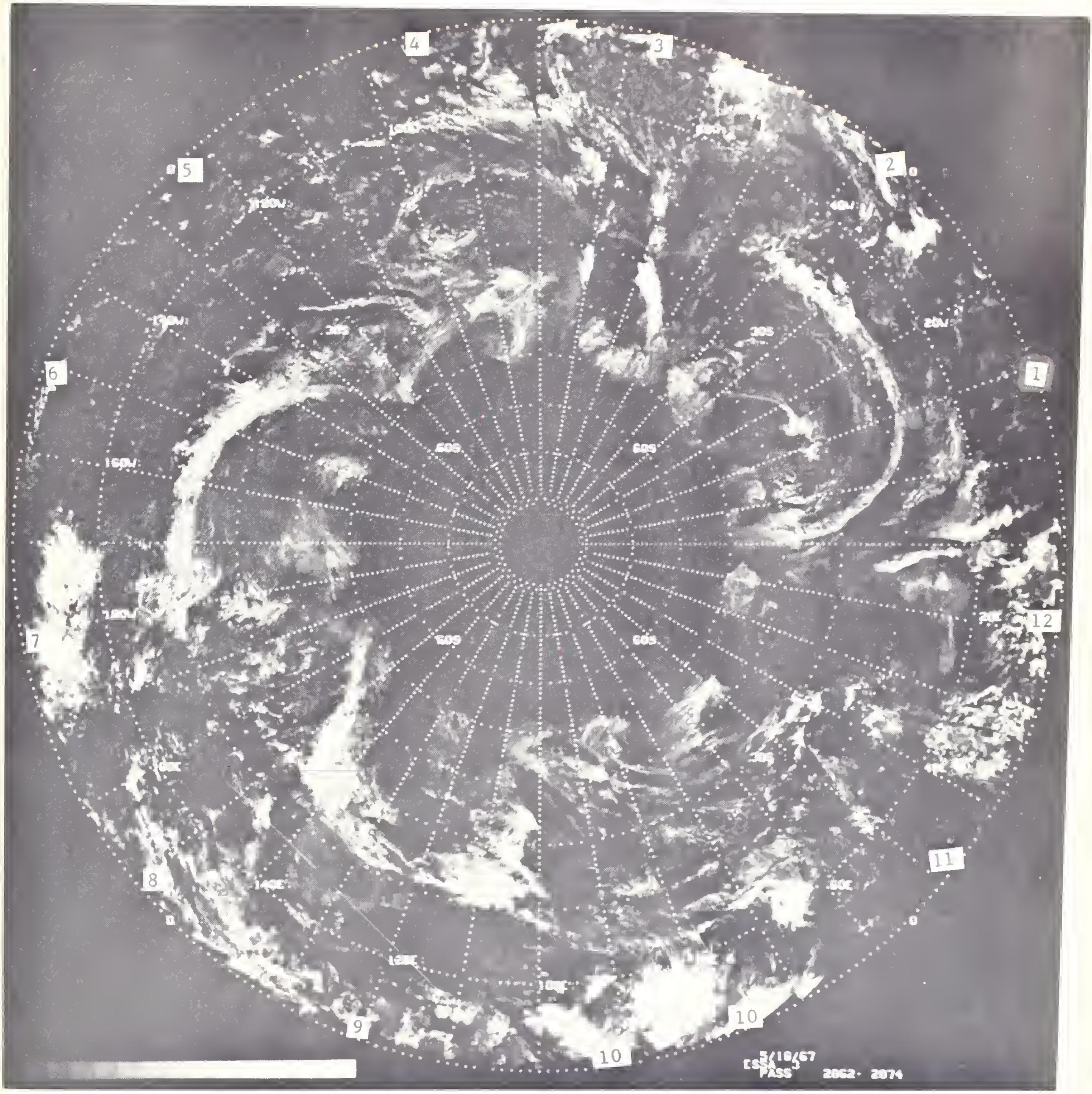
4
3
3/10/67
ESSA 3
PASS 2862- 2874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160W
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120W
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20W
160W
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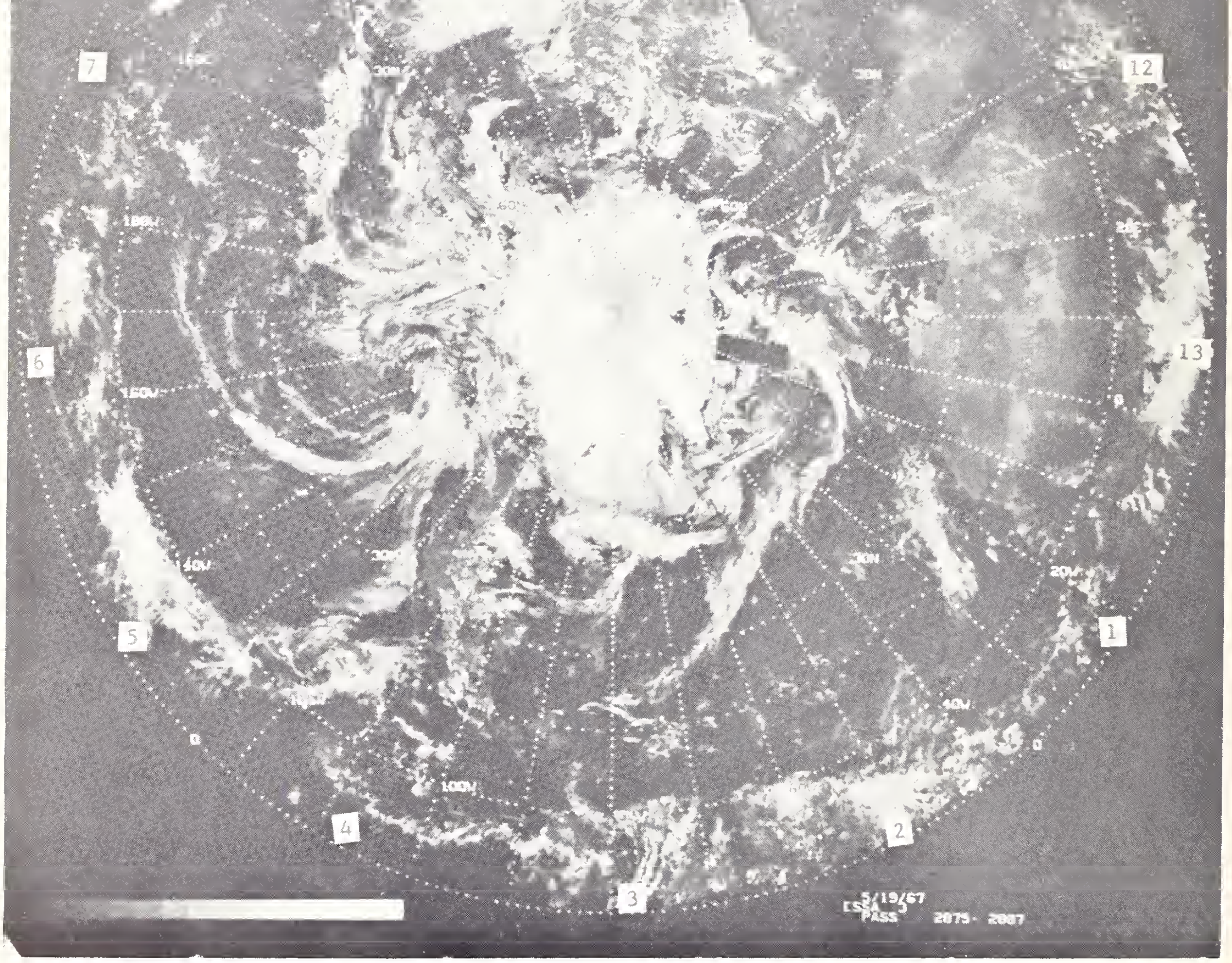
60S
5/18/67
ESSA
PASS 2862- 2874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60S
30S
180W
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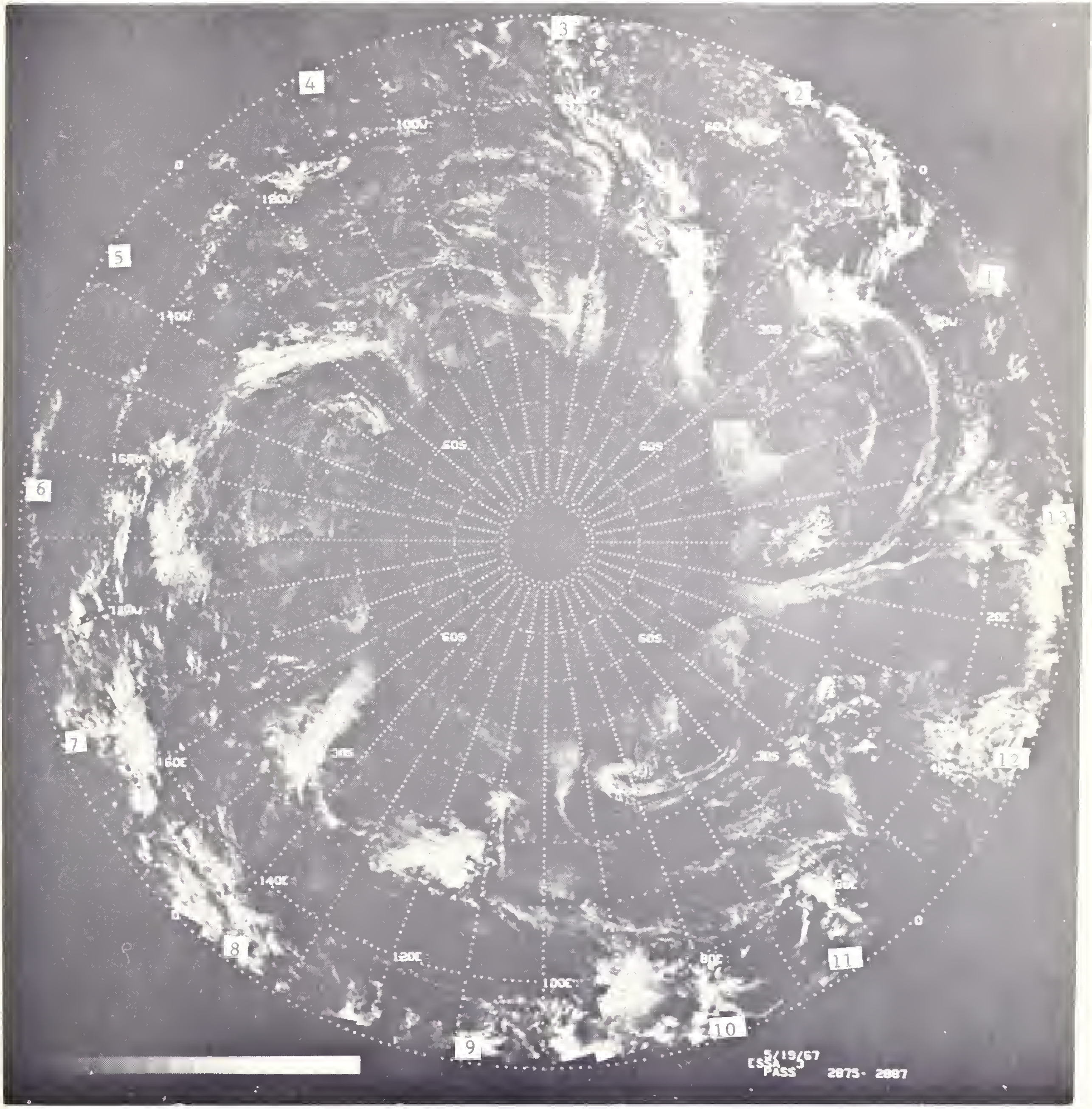
140W
100W
100E
60E
20E
20W
40W
0
5/19/67
ESSA 3
PASS 2075- 2087



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160W
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20E
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30S
30S
160E
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40E
140E
60E
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120E
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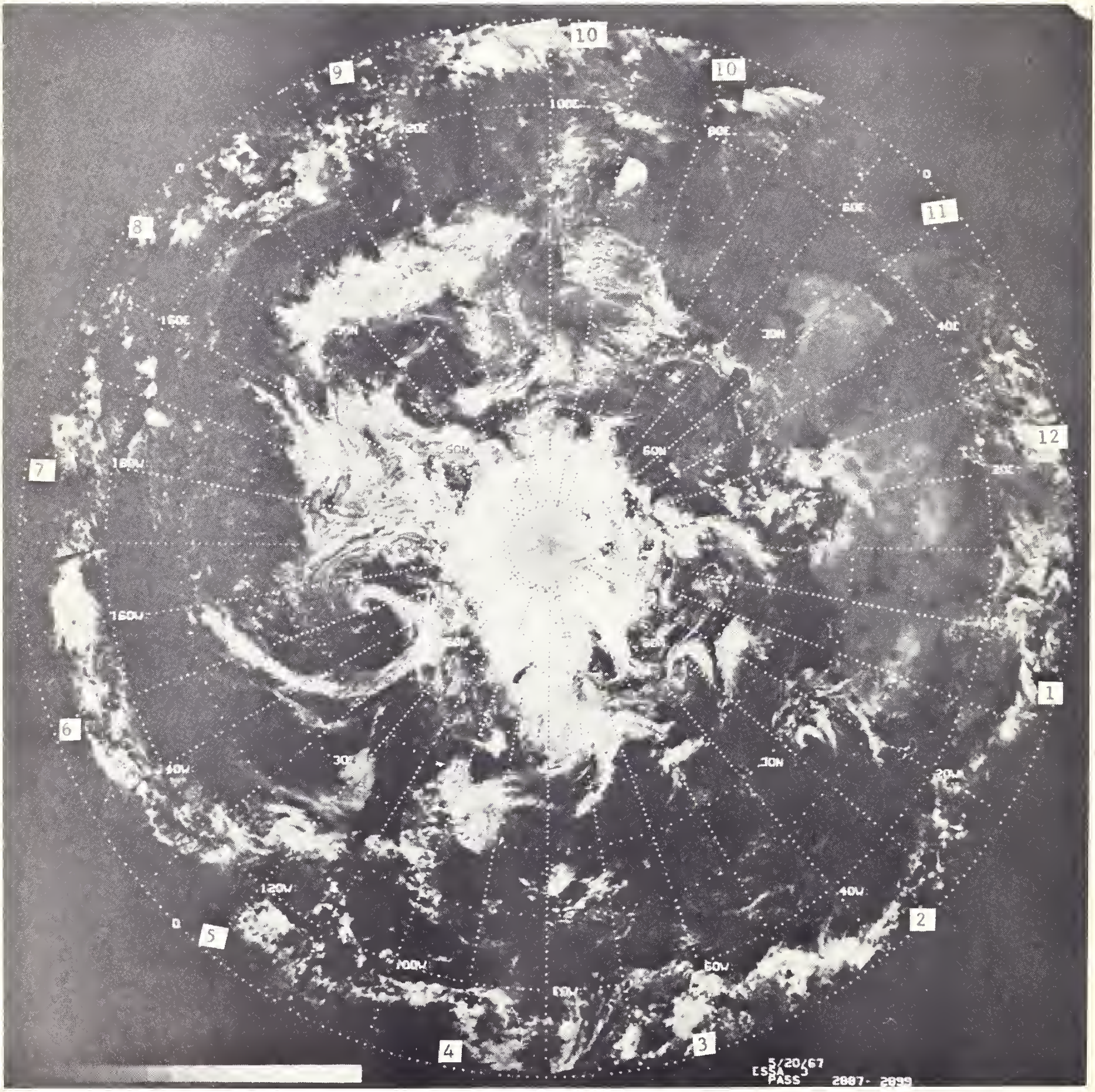
5/19/67
ESSA 3
PASS 2875 - 2887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160E
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160W
60N
60N
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140W
30N
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100W
60W
80W
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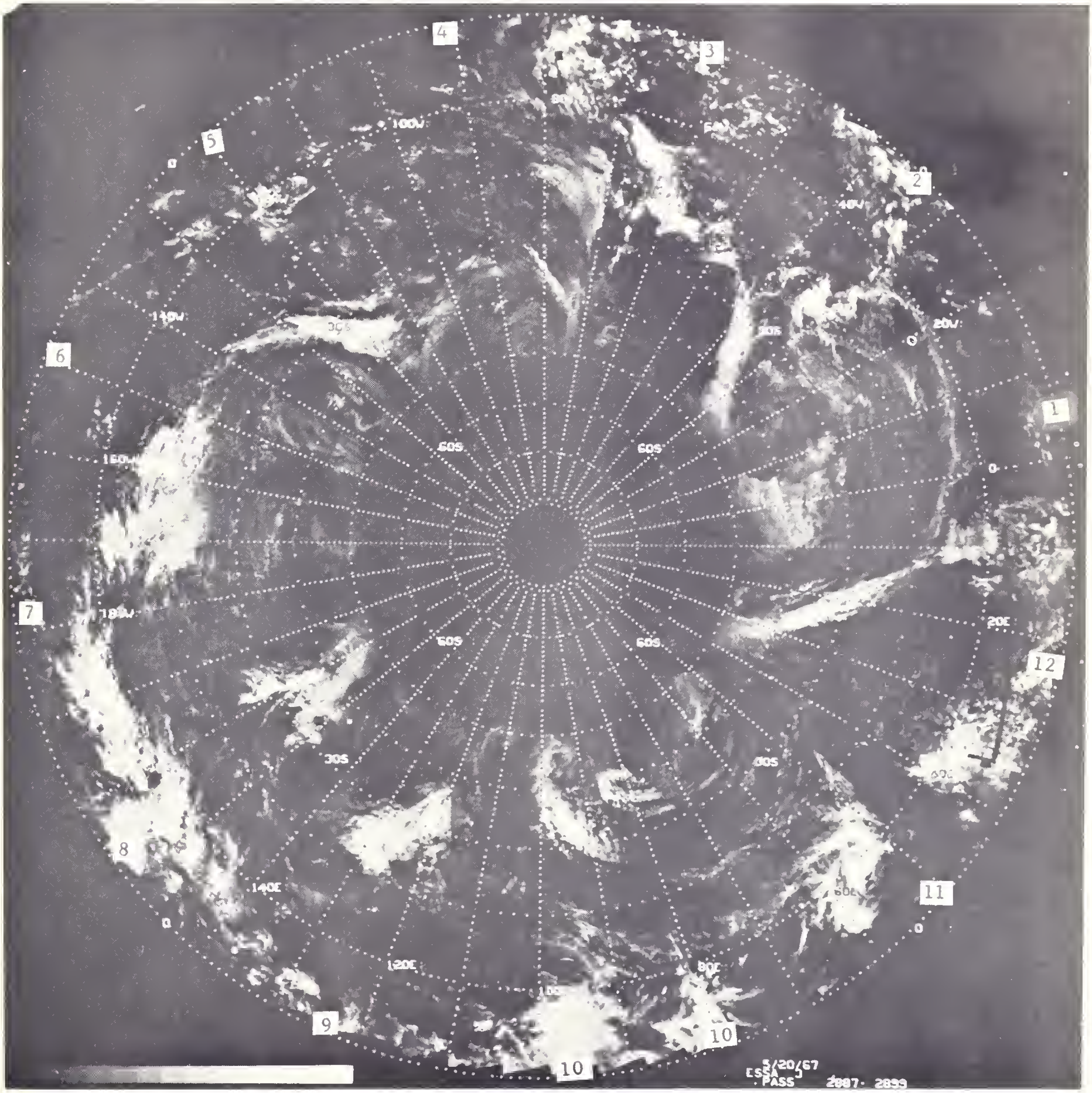
3
5/20/67
ESSA 3
PASS 2887- 2899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60S
12
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30S
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60E
120E
80E
100E
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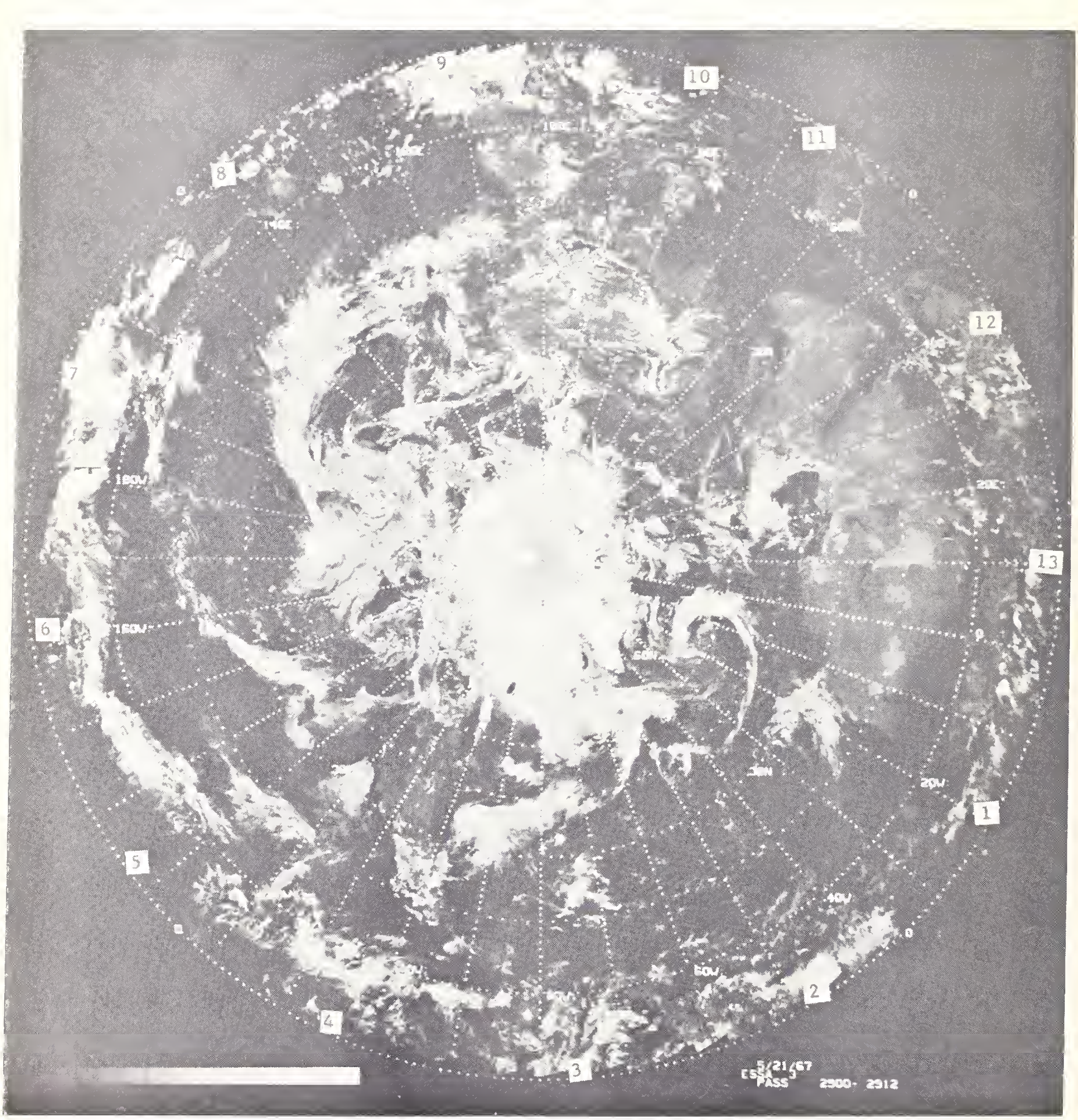
5/20/67
ESSA 3
PASS
2887- 2899



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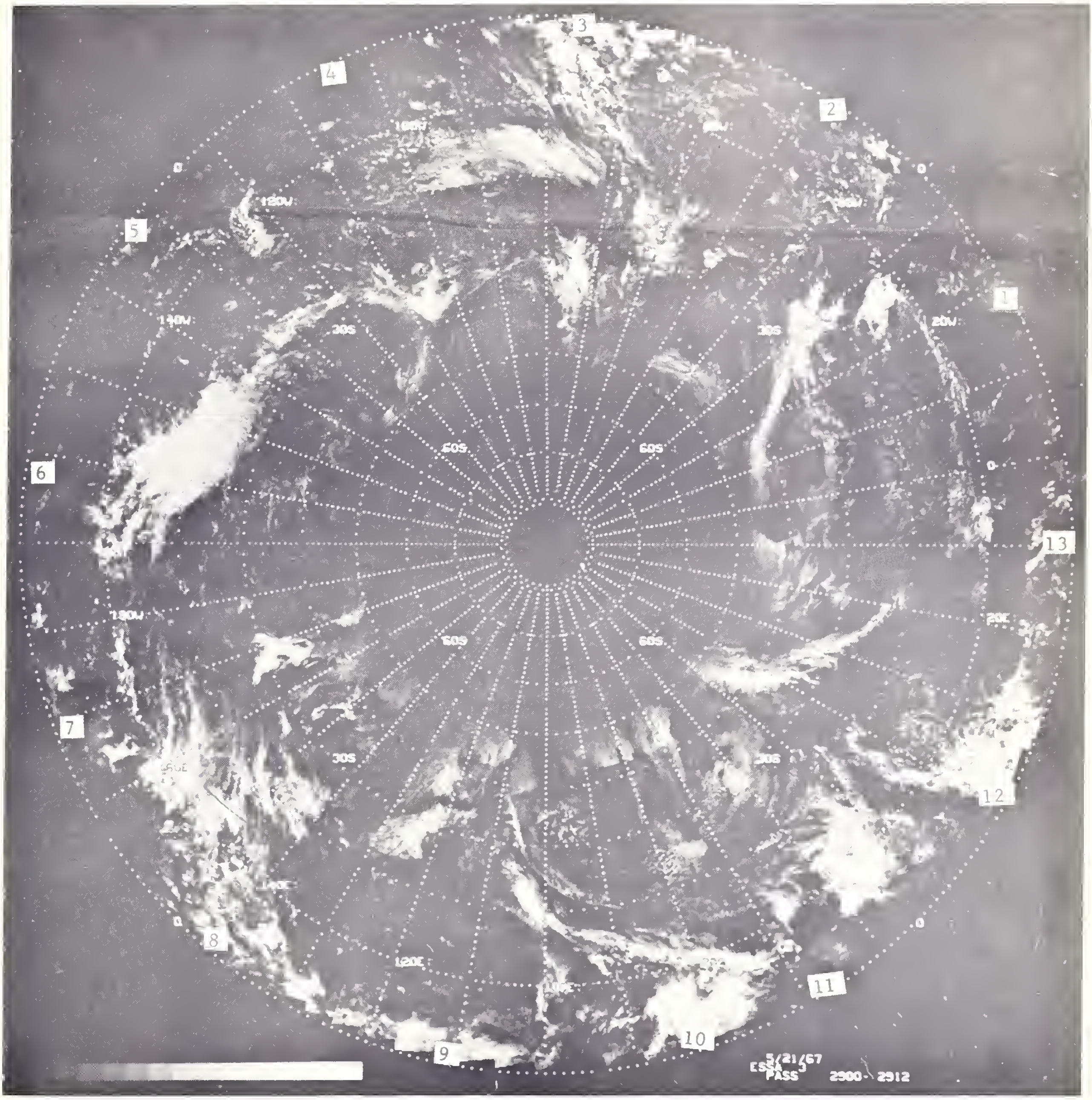
5/21/67
ESSA 3
PASS 2900- 2912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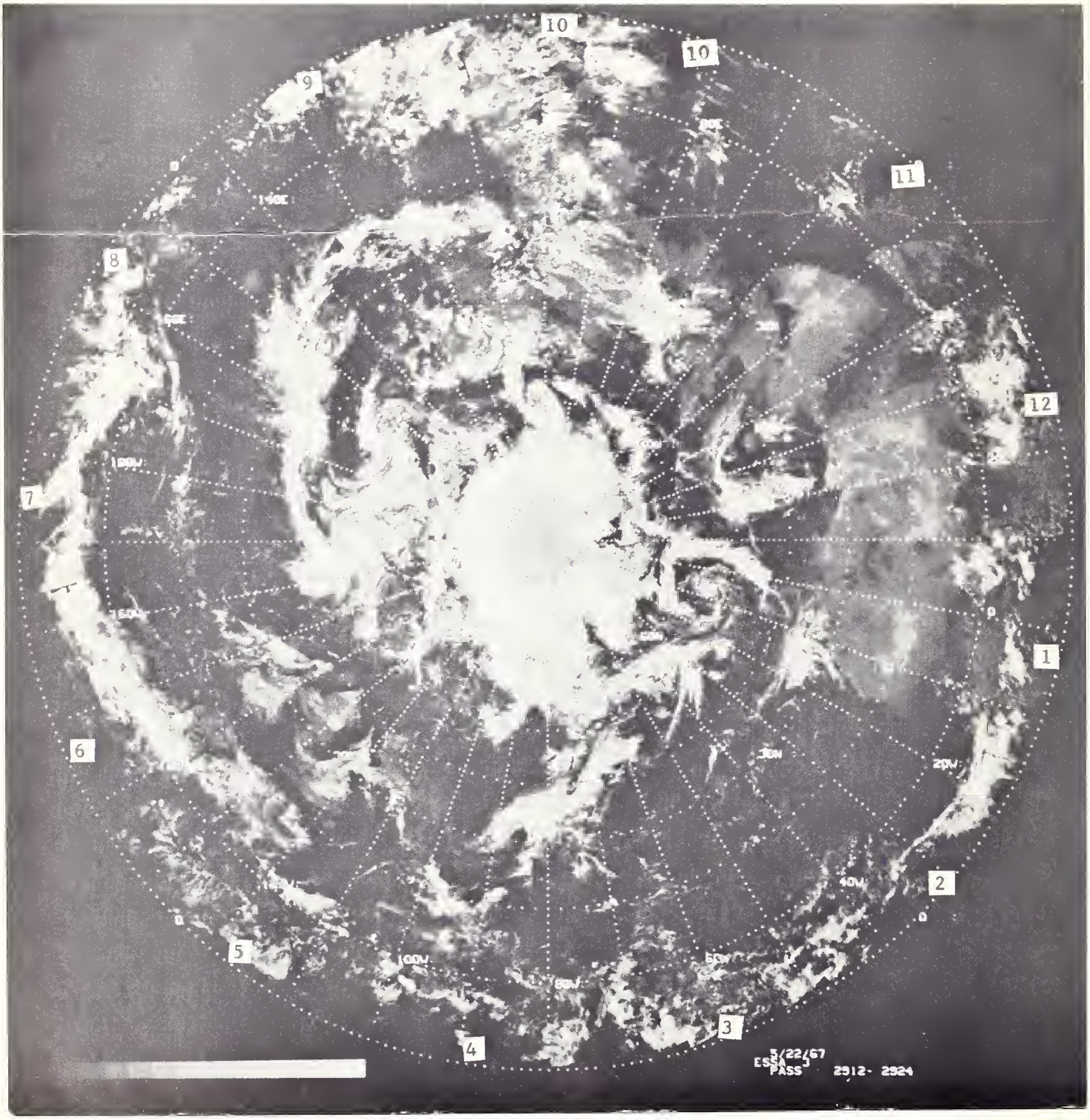
5/21/67
ESSA 3
PASS 2900 - 2912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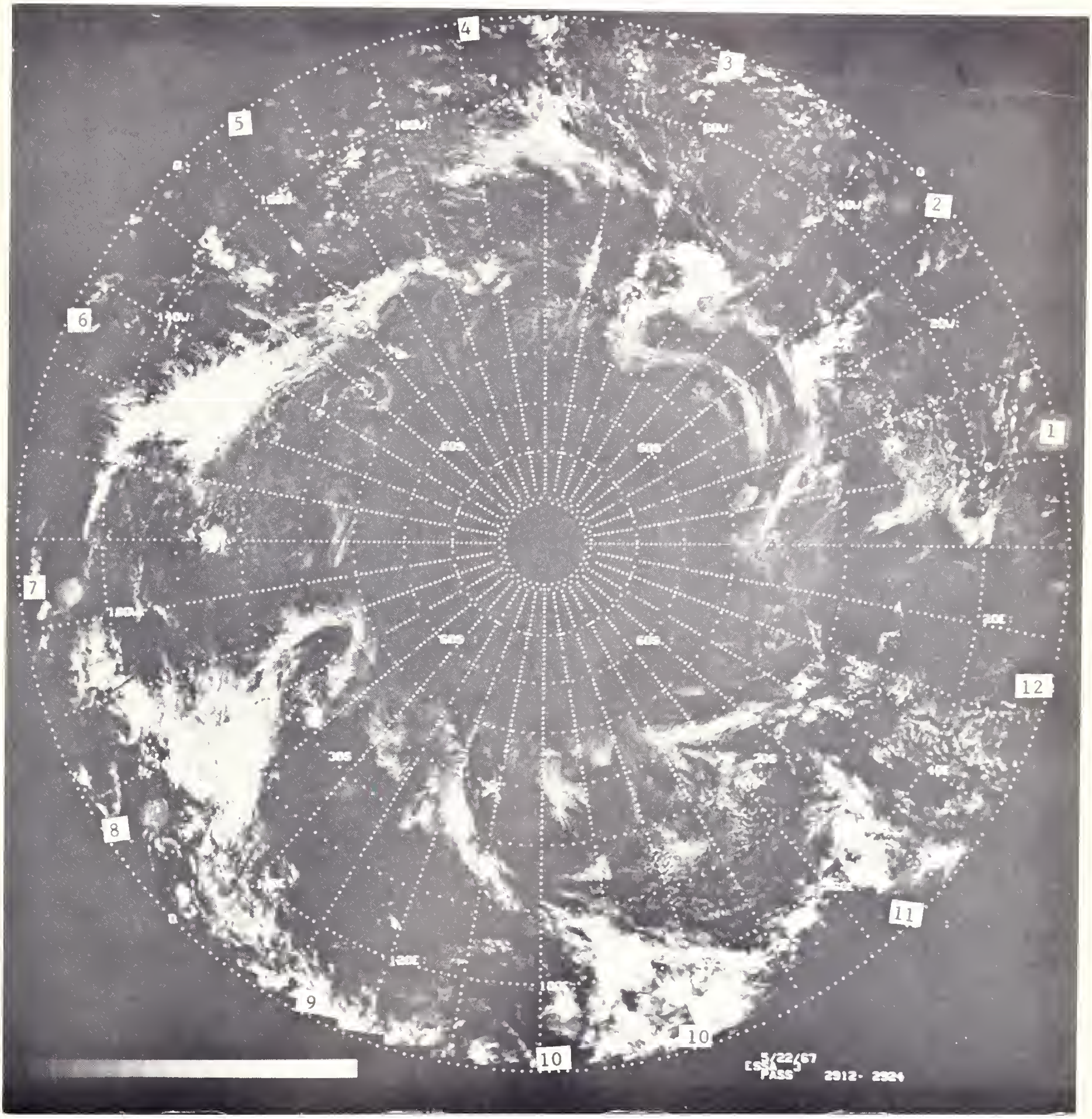
3/22/67
ESSA 3
PASS 2912- 2924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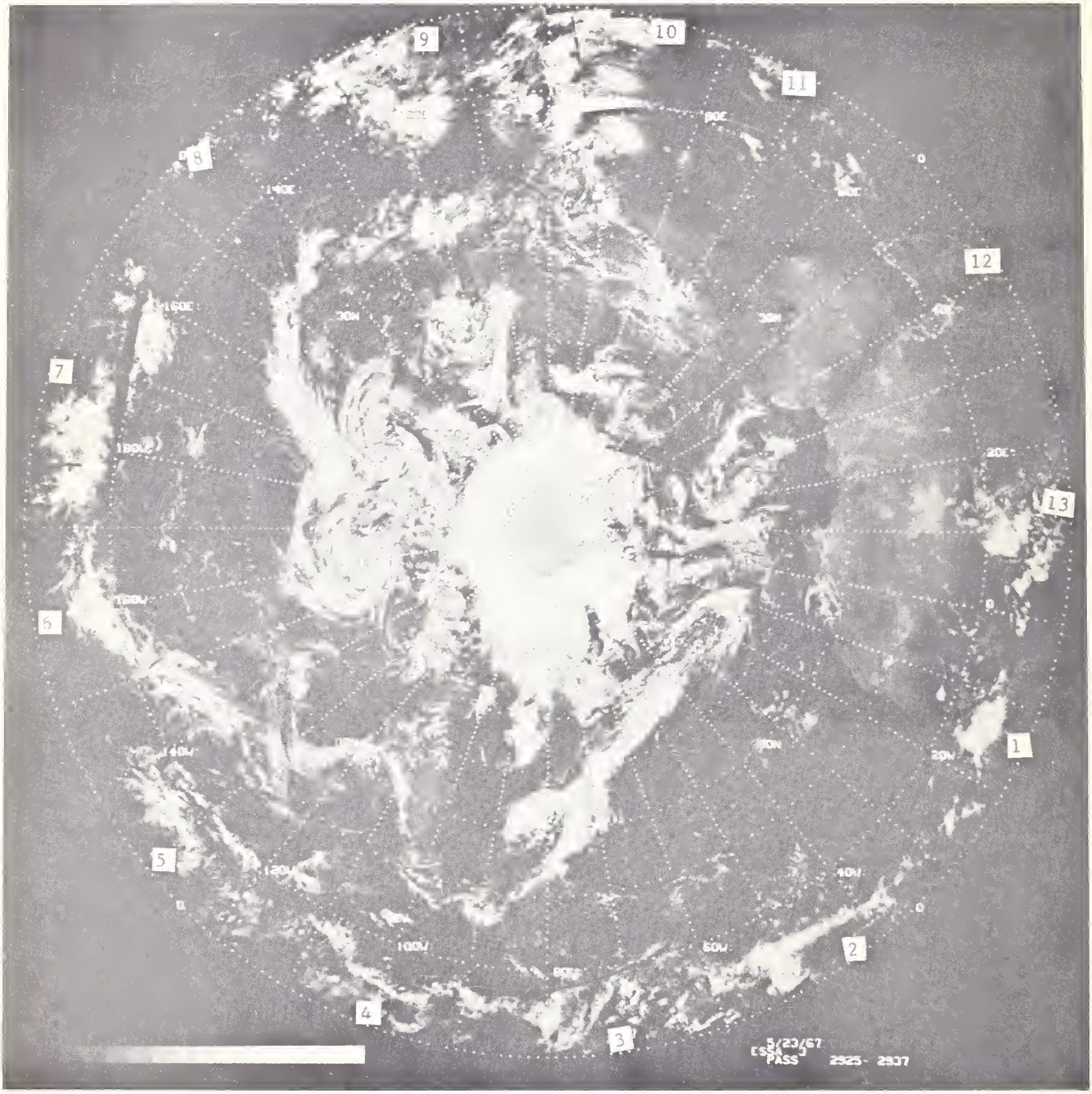
5/22/67
ESSA 3
PASS 2912- 2924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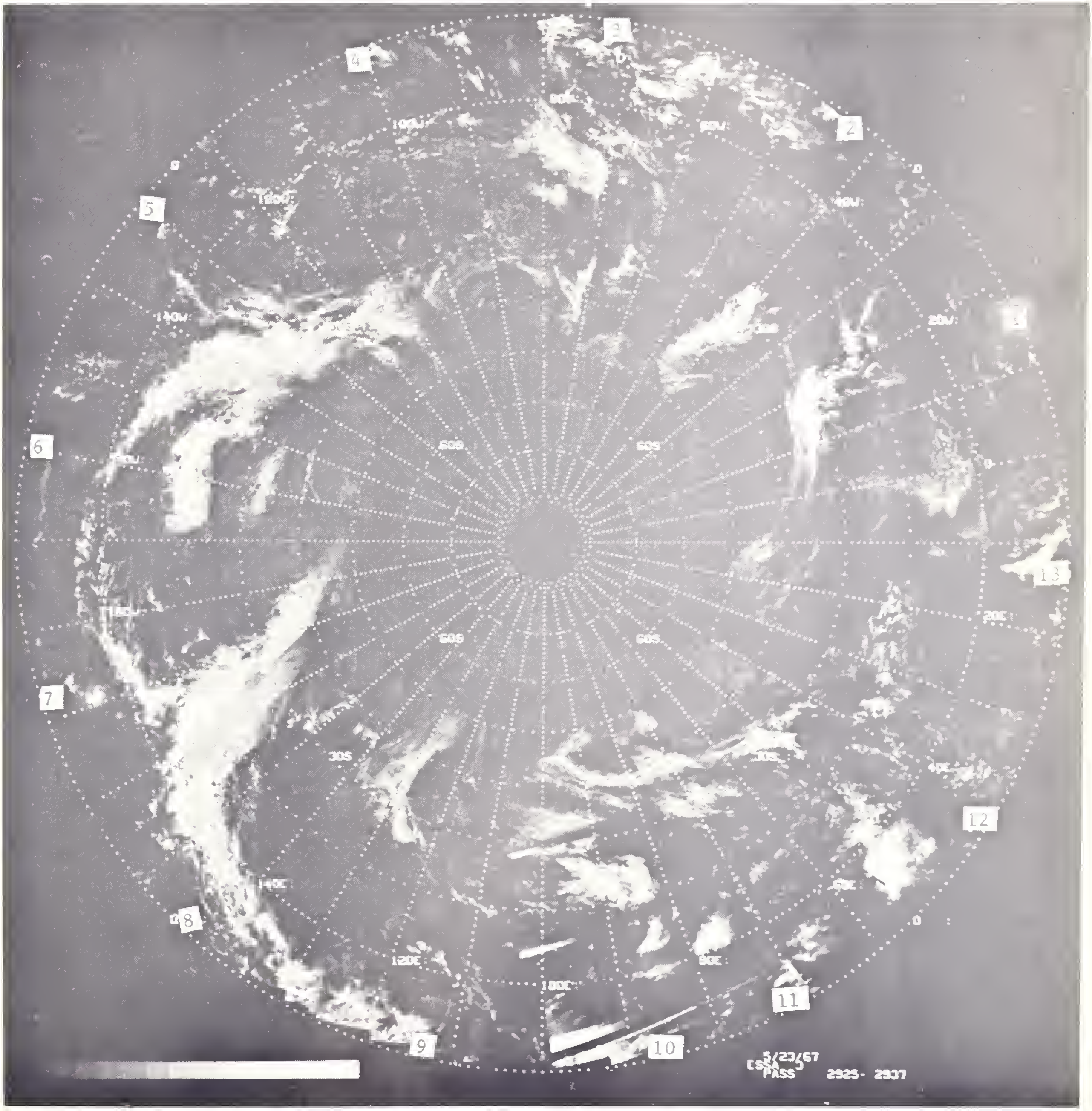
5/23/67
ESSA 3
PASS 2925- 2937



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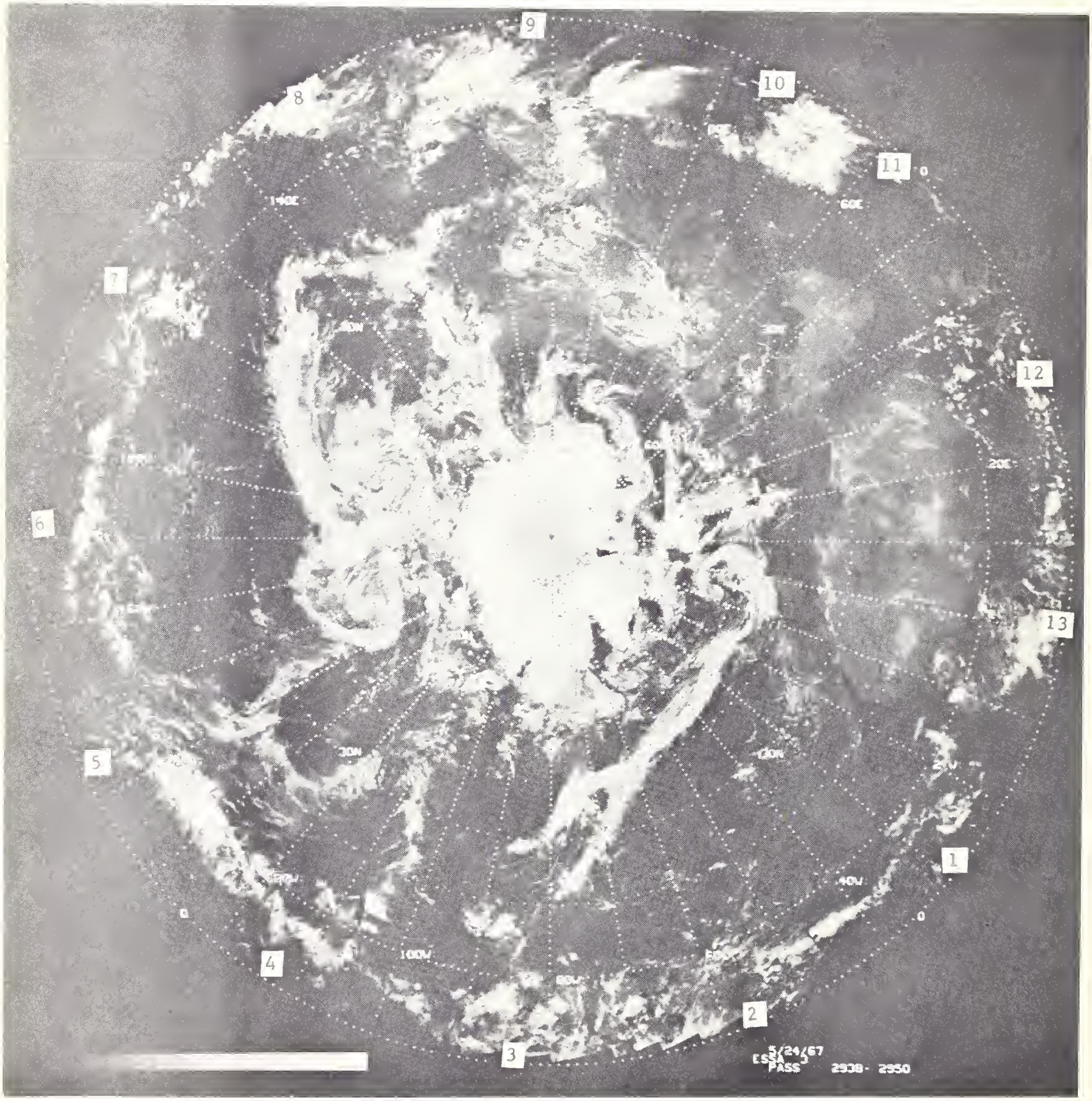
5/23/67
ESSA 3
PASS 2925 - 2937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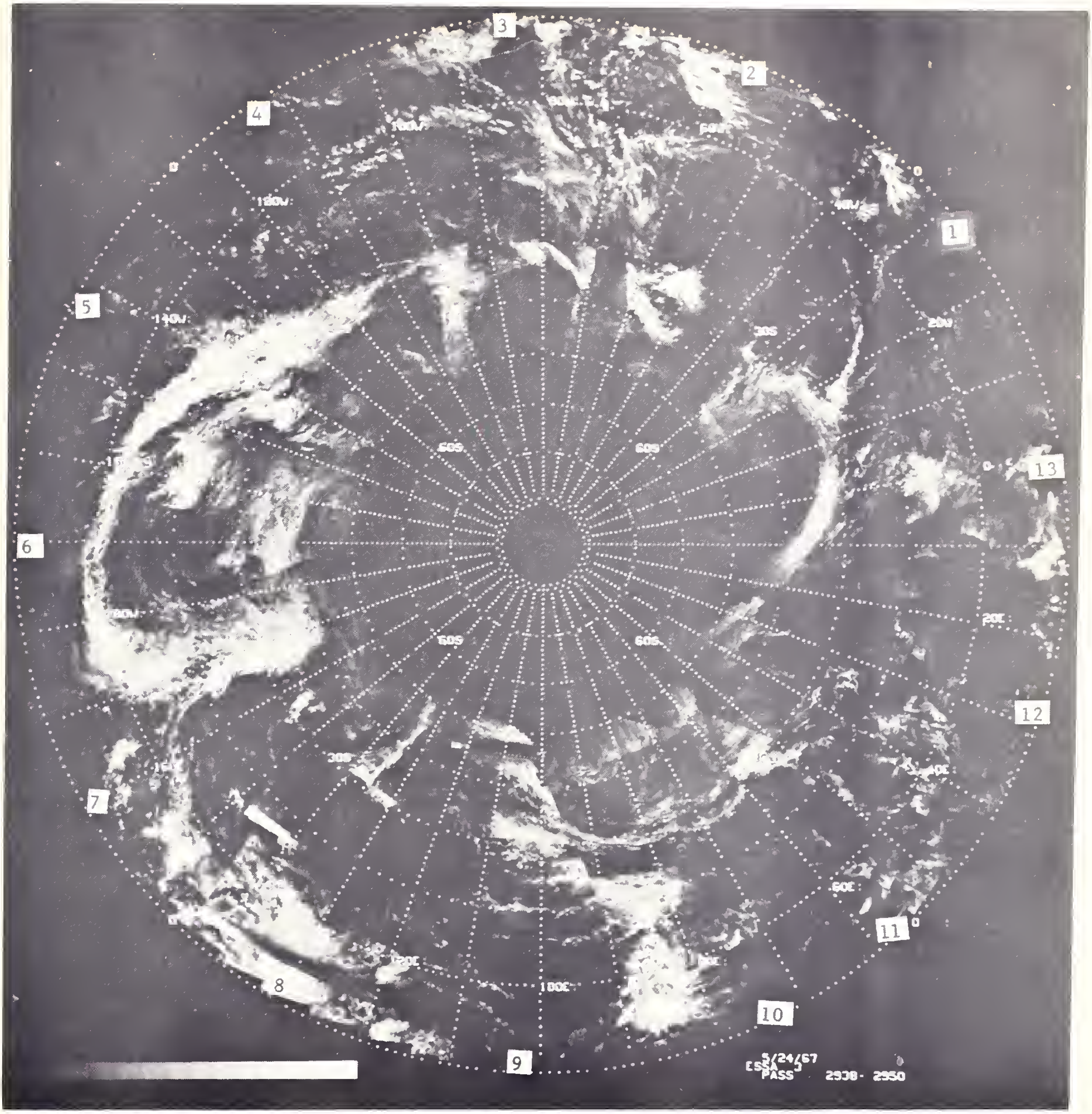
ESSA 3
PASS 2938 - 2950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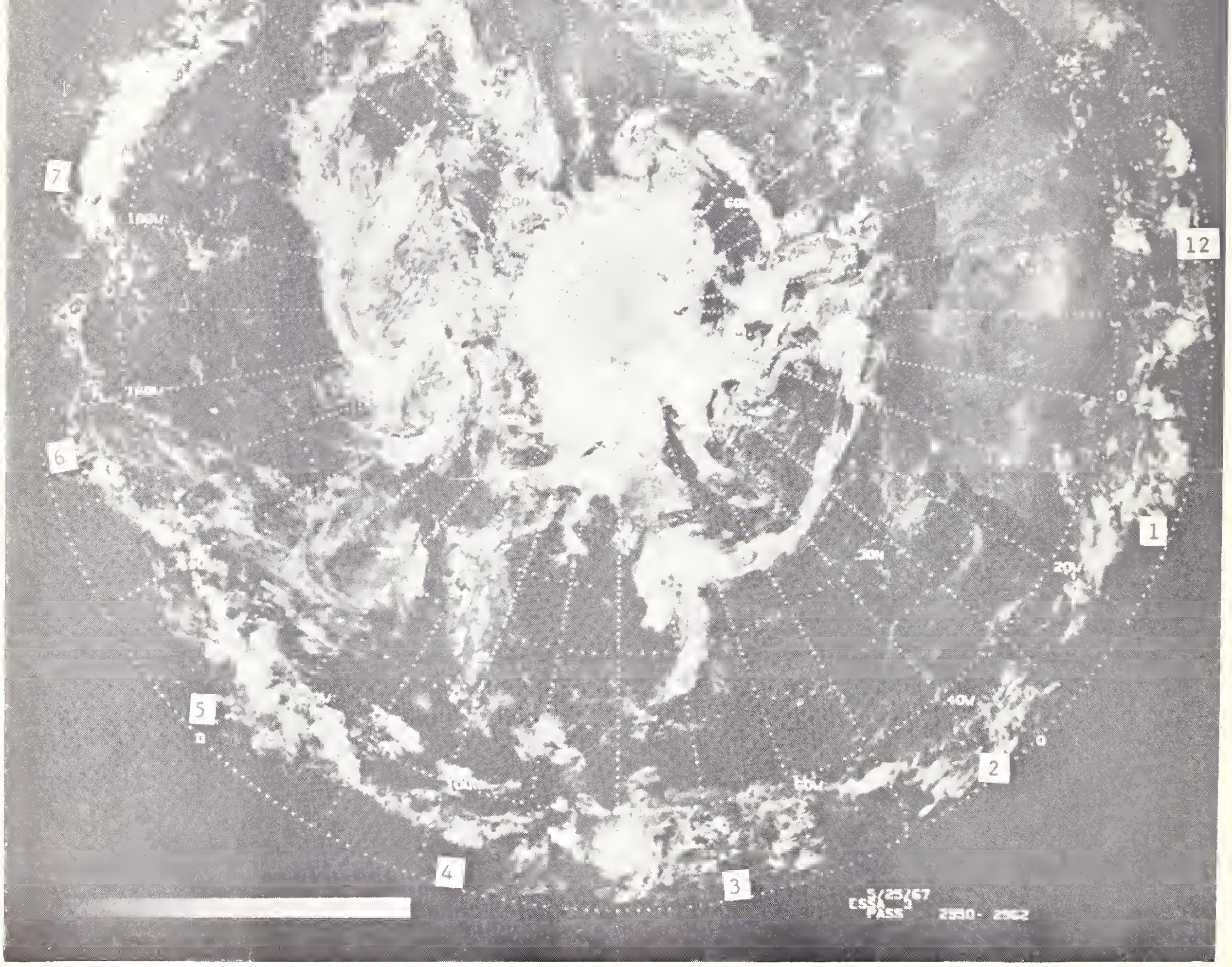
5/24/67
ESSA 3
PASS 2938- 2950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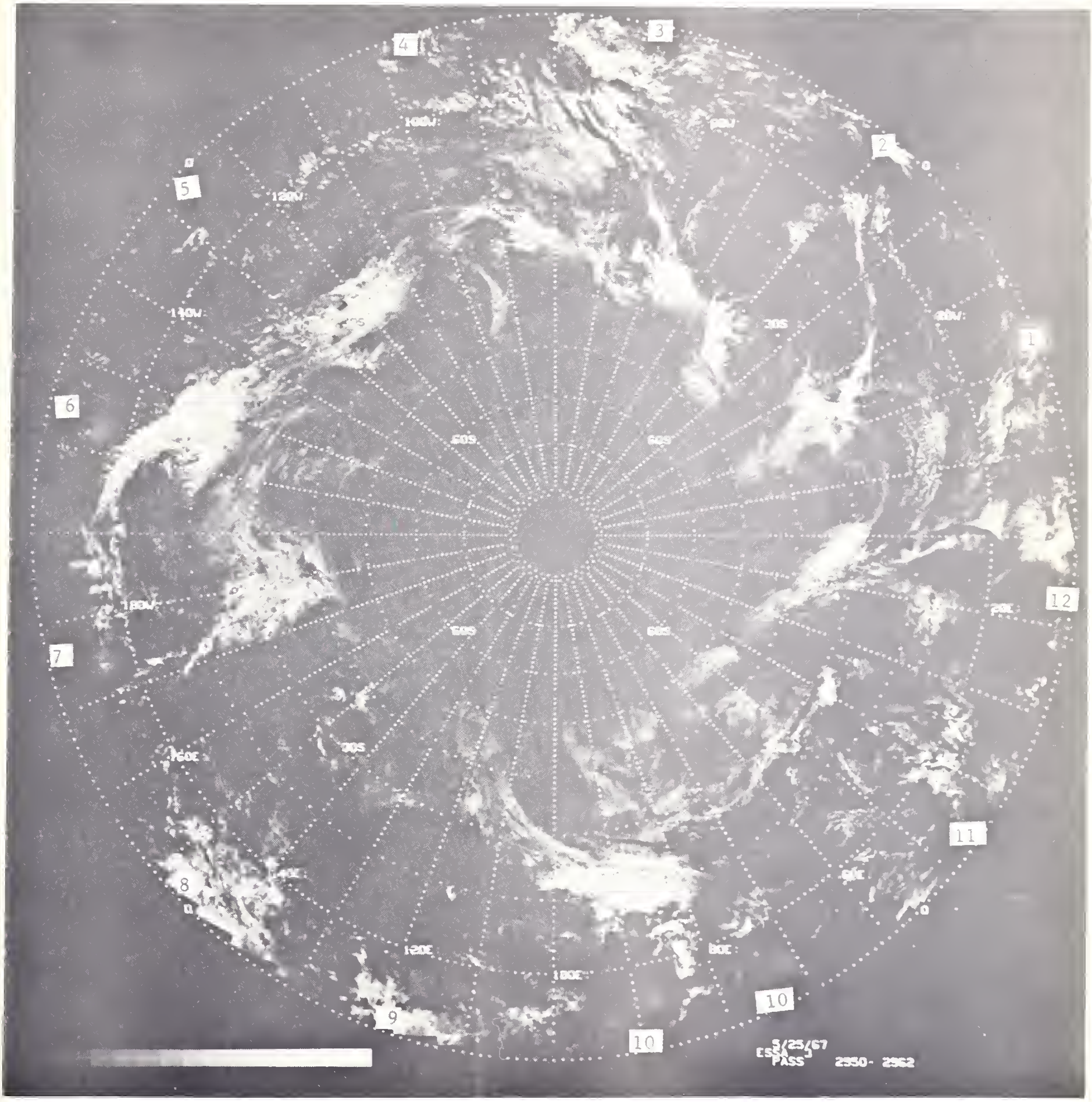
3/25/67
ESSA 3
PASS 2550- 2562



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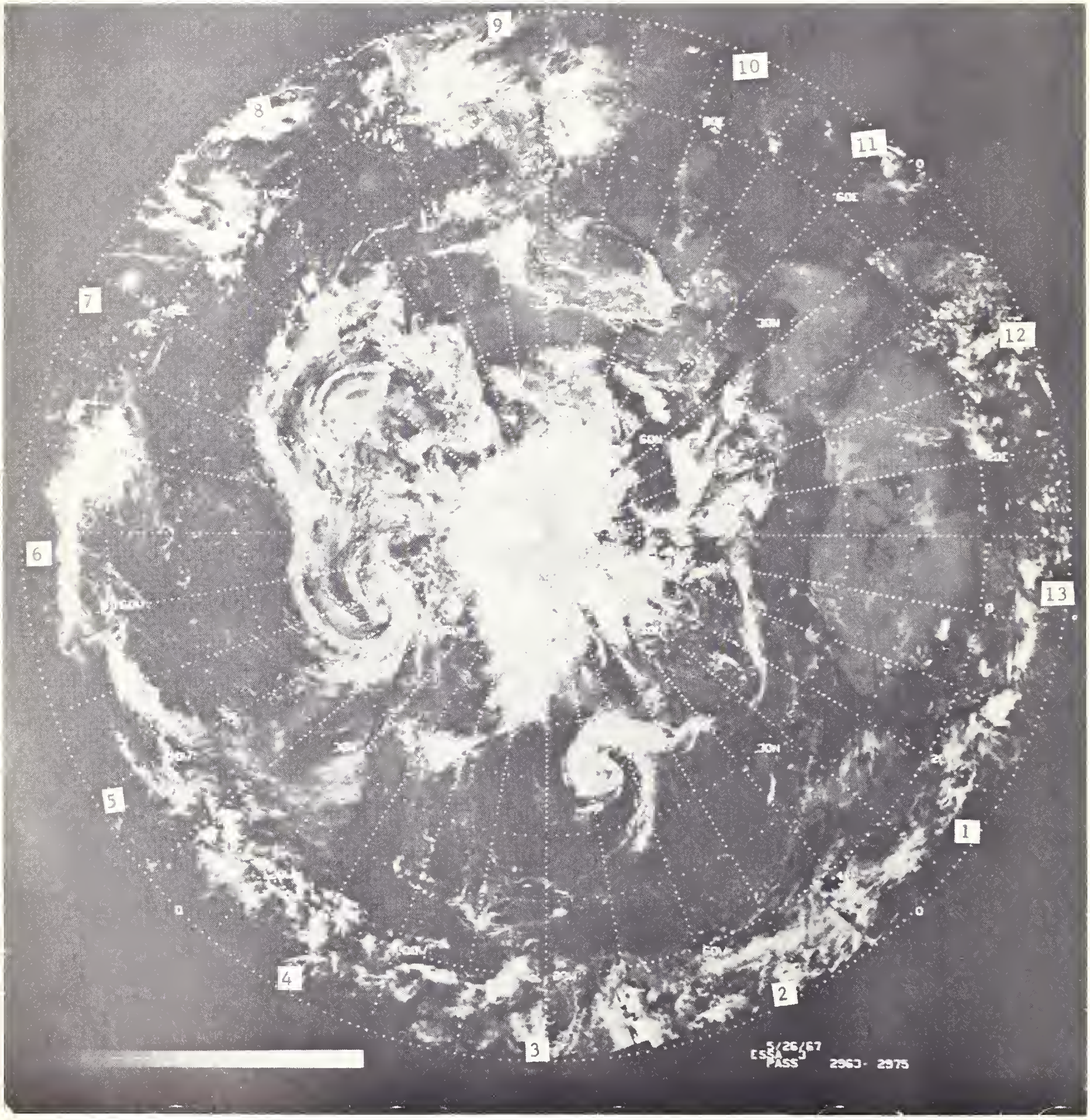
3/25/67
ESSA 3
PASS 2950- 2962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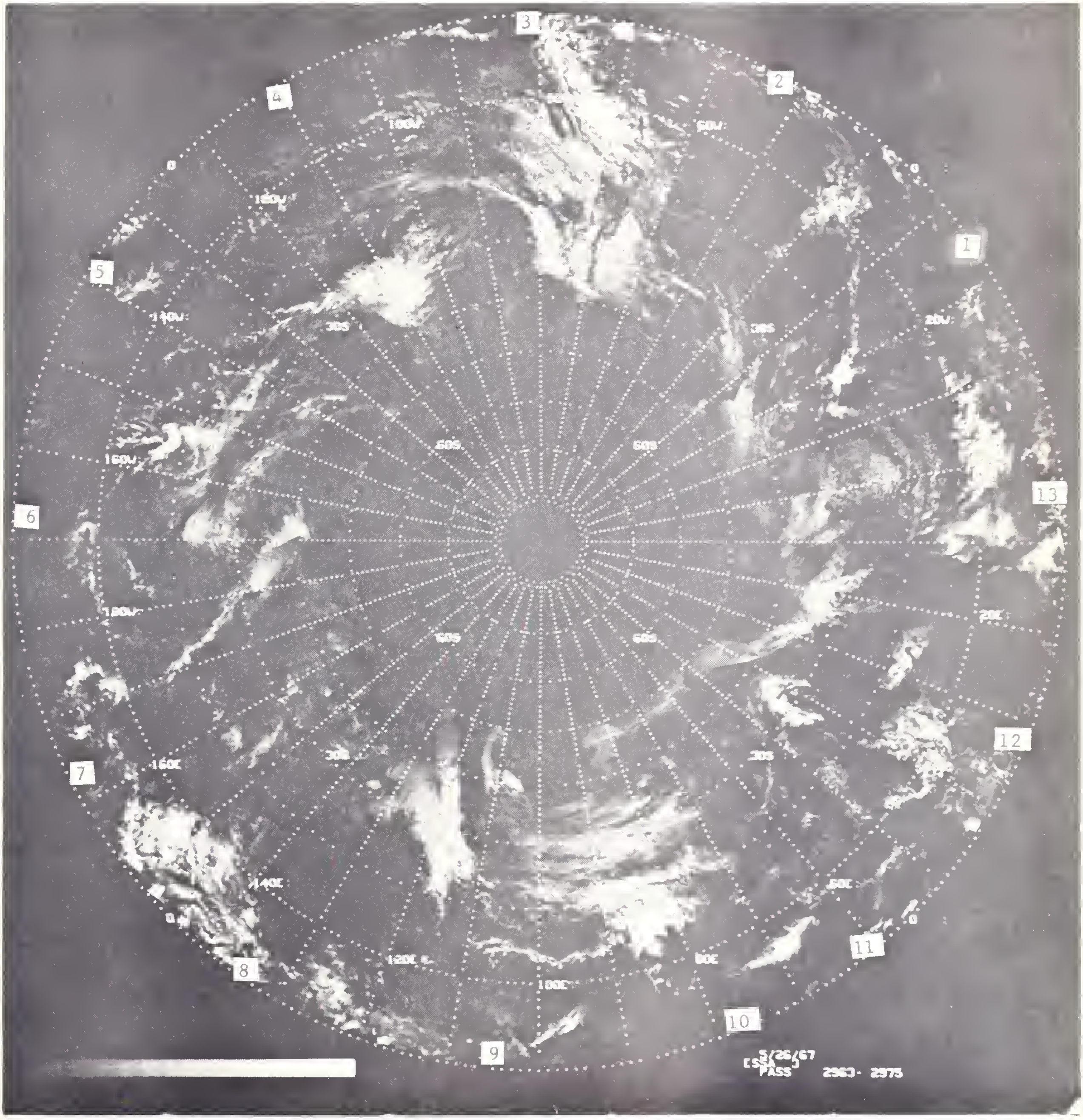
5/26/67
ESSA 3
PASS 2963- 2975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100E
80E
60E
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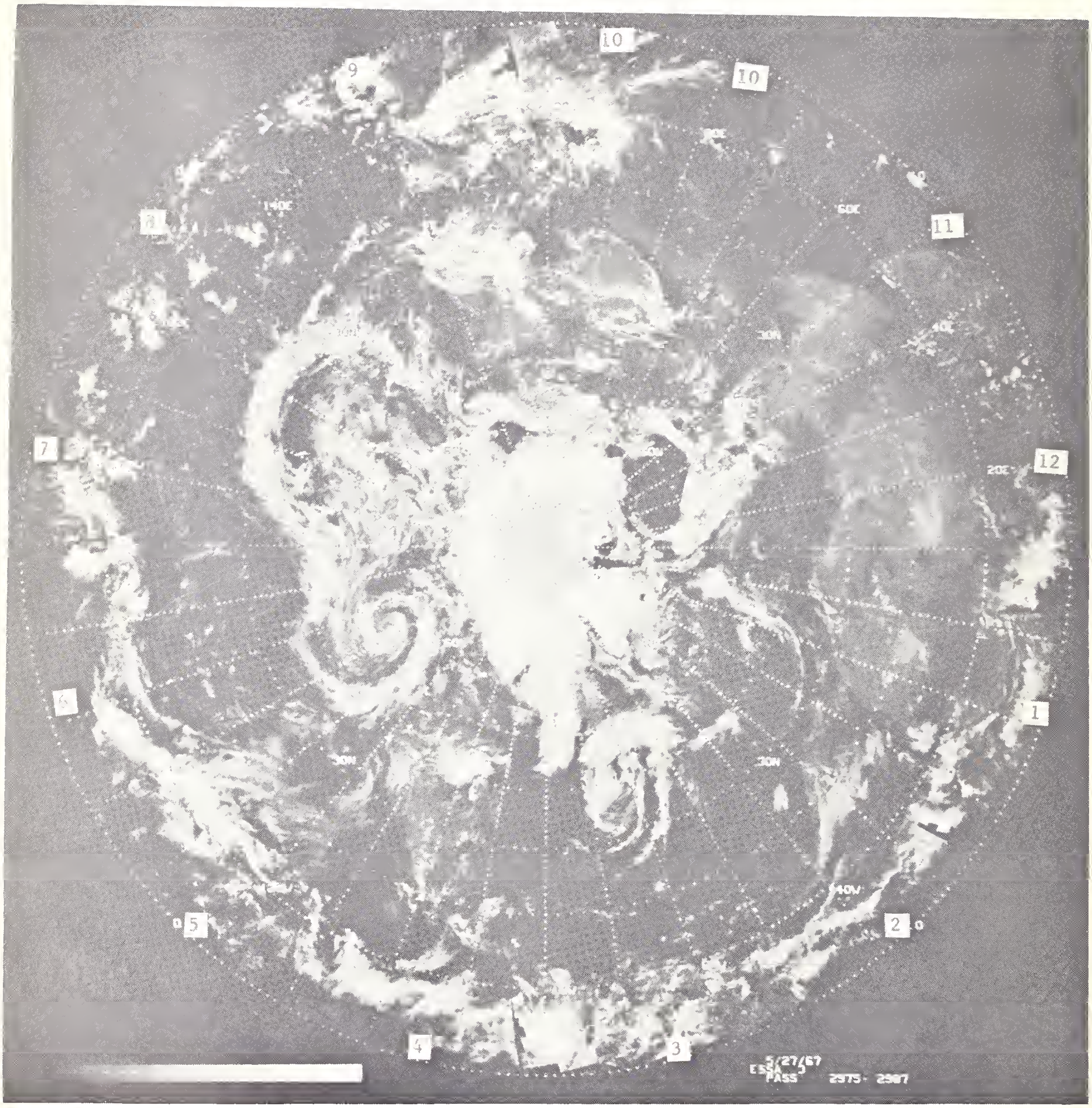
5/26/67
ESSA 3
PASS 2963- 2975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20E
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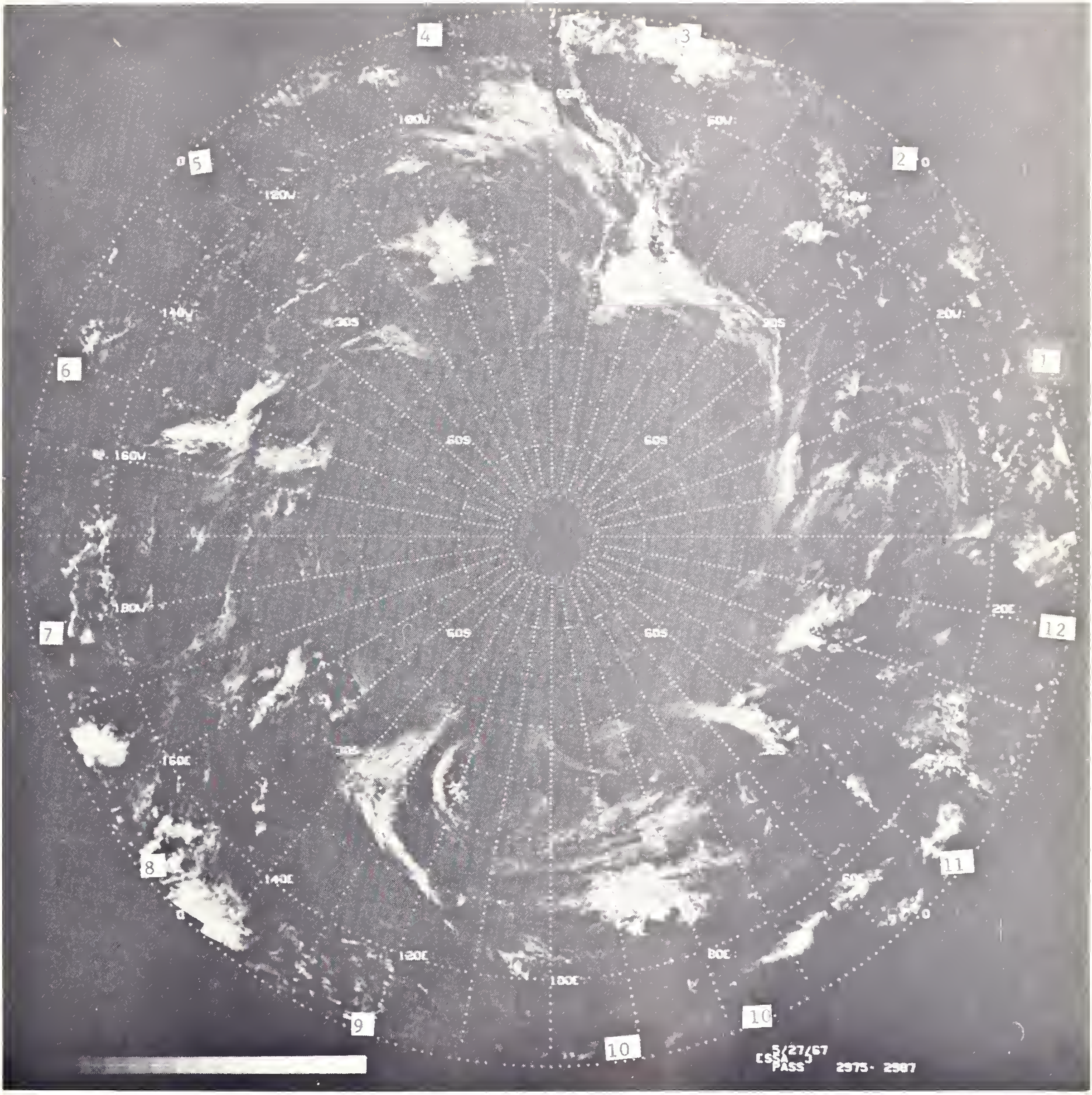
5/27/67
ESSA 5
PASS 2975- 2987

4
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160E
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60E
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80E
100E
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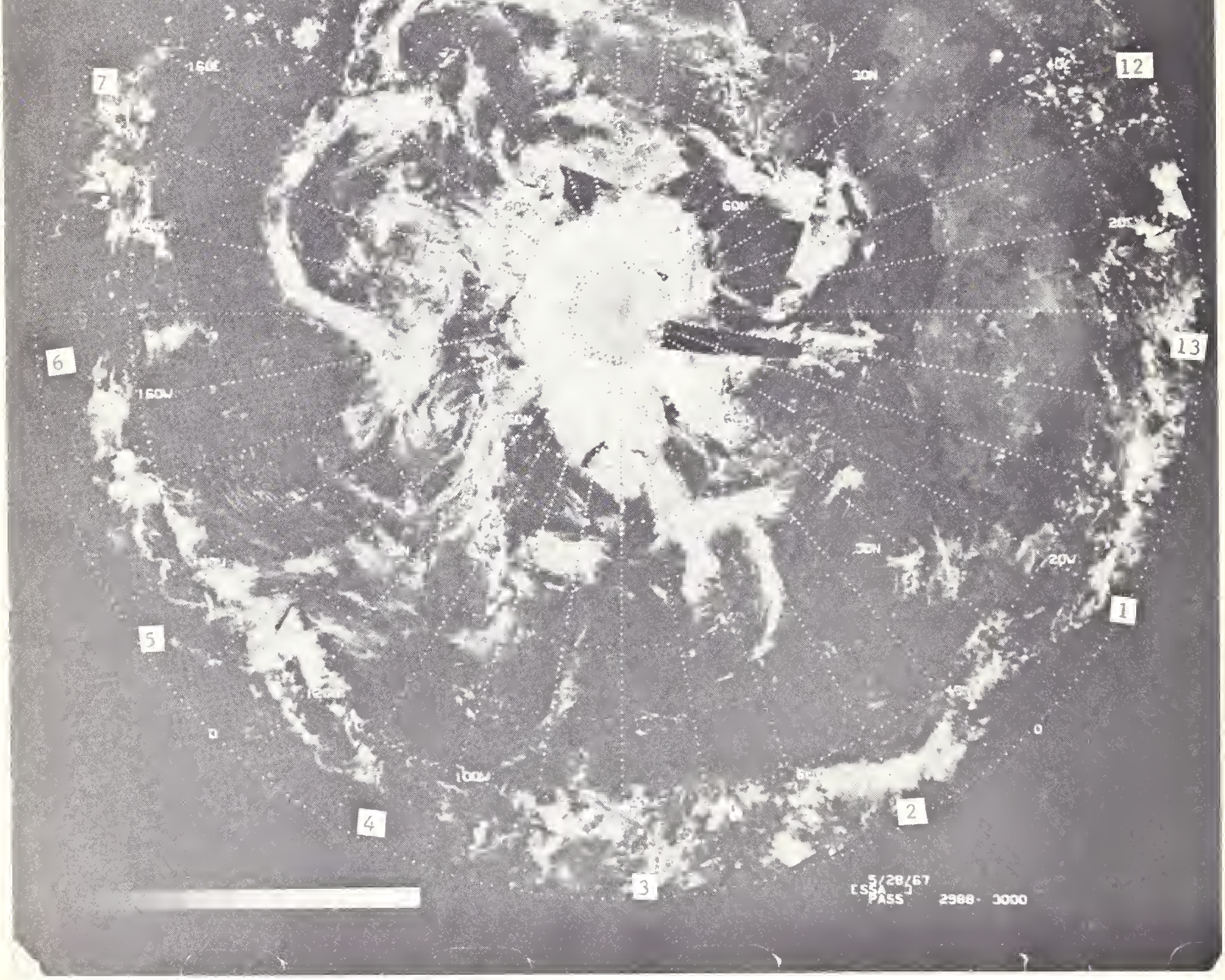
5/27/67
ESSA 3
PASS 2975- 2987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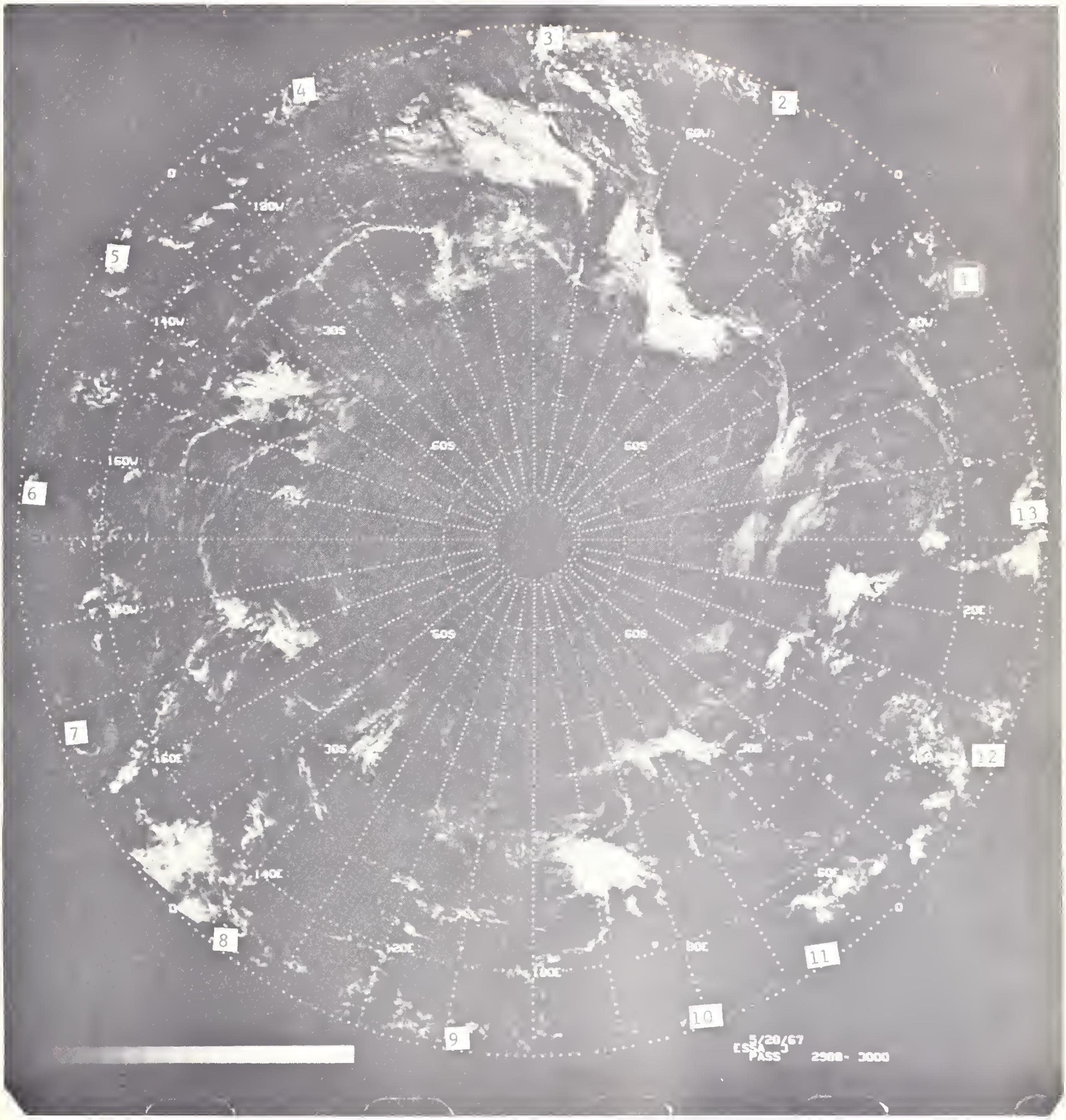
5/28/67
ESSA
PASS 2988-3000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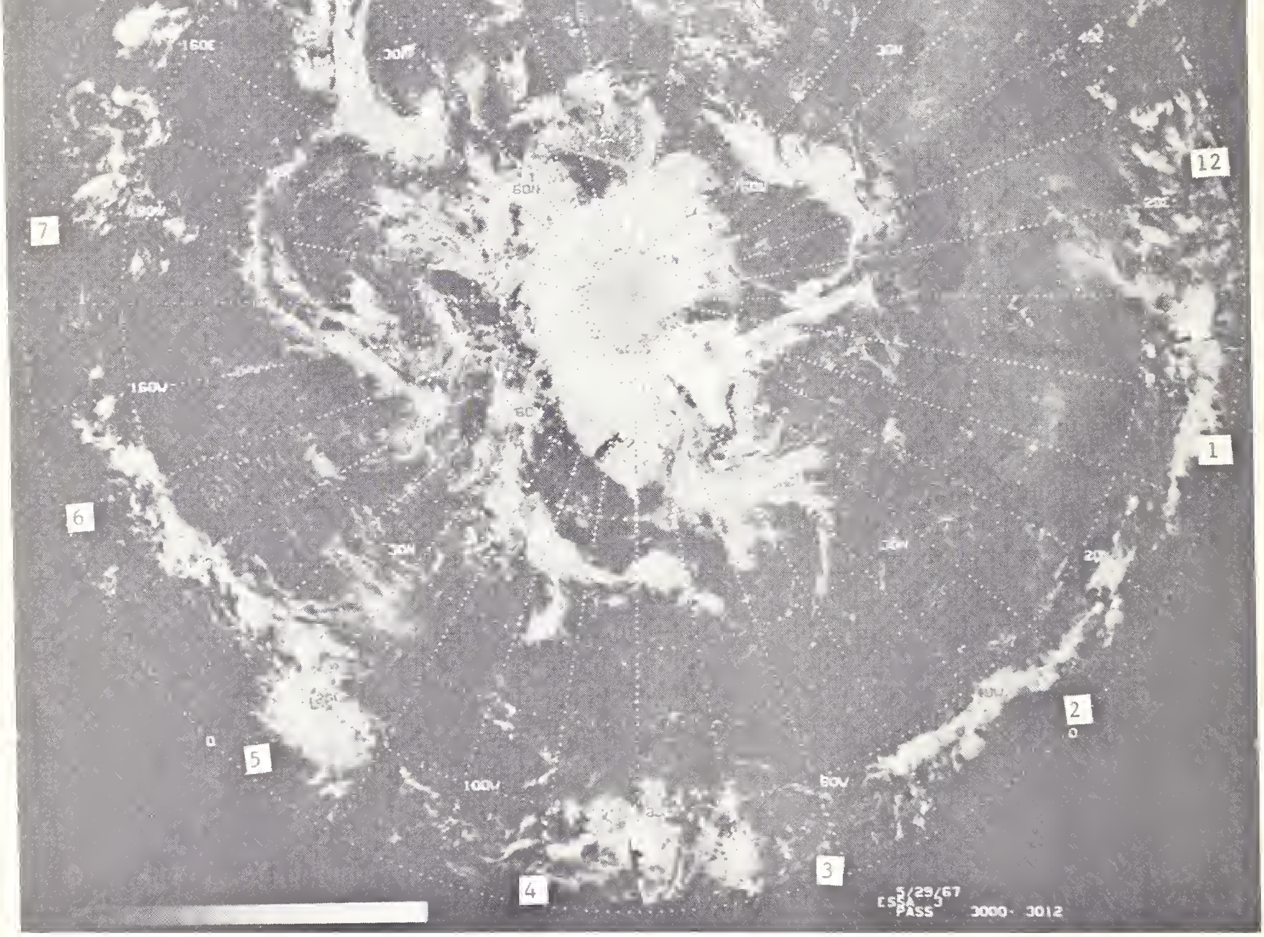
5/20/67
ESSA 3
PASS 2988- 3000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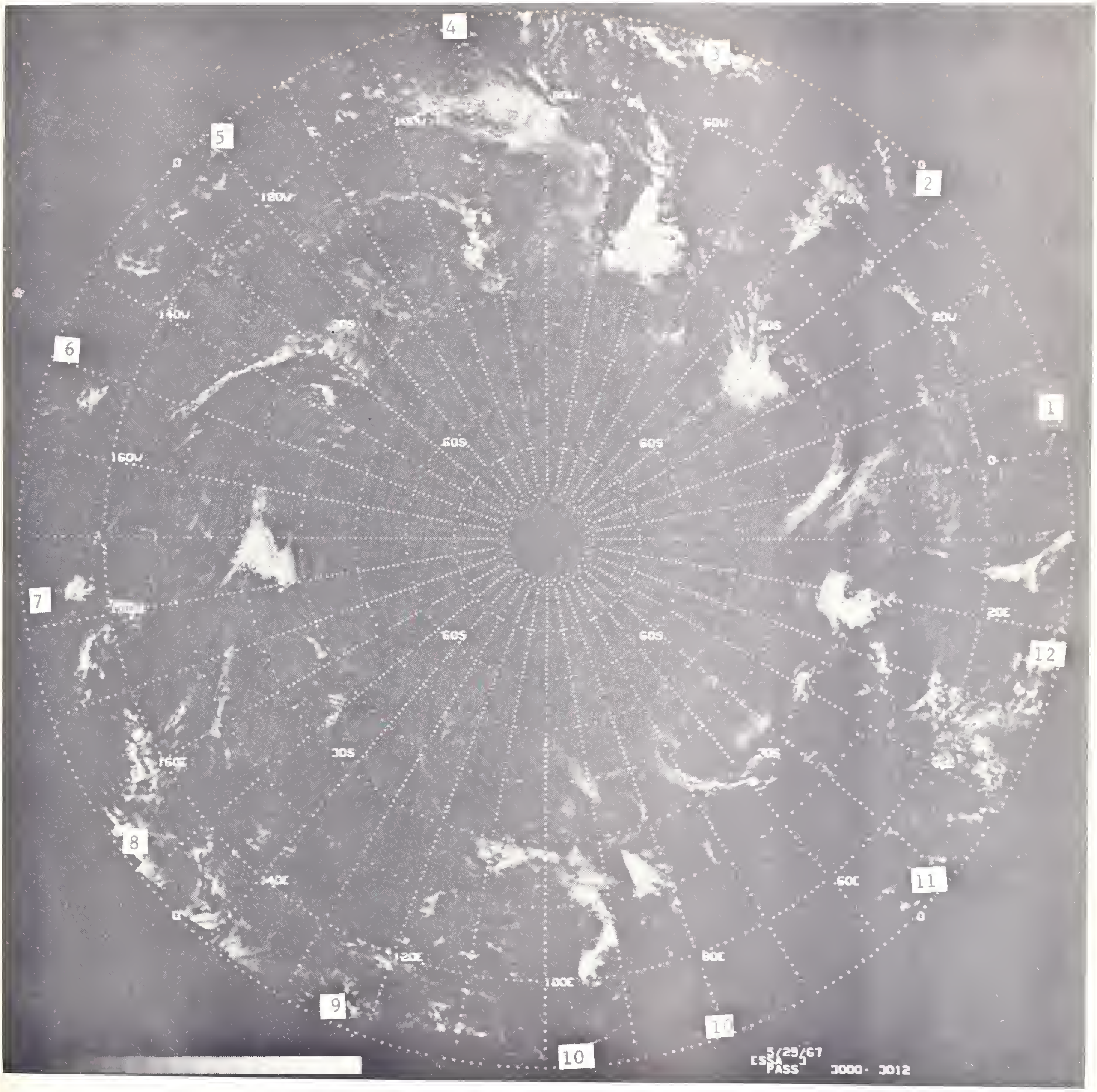
5/29/67
ESSA 5
PASS 3000- 3012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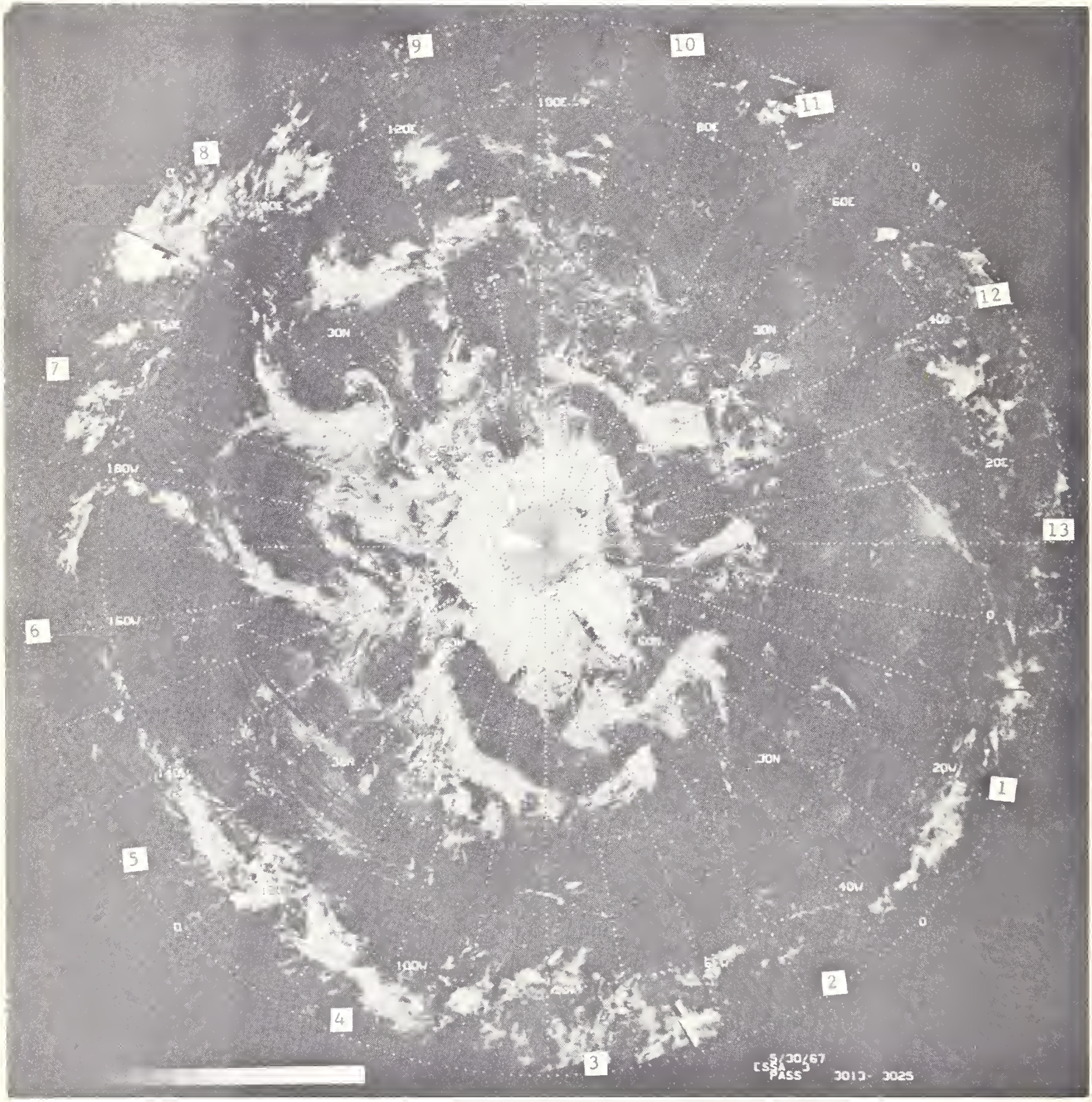
5/29/67
ESSA 3
PASS 3000 · 3012



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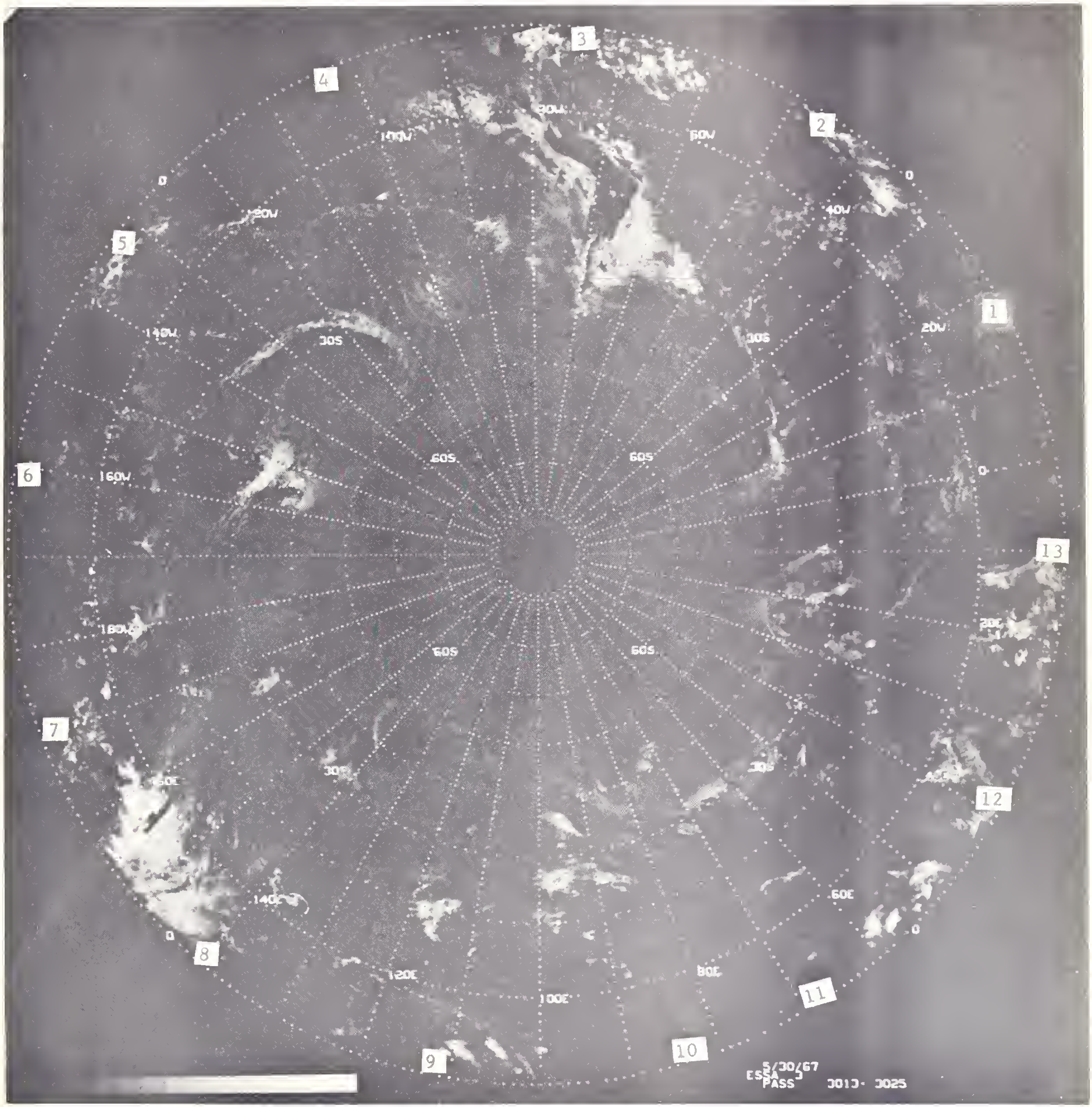
5/30/67
ESSA 3
PASS 3013- 3025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120E
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100E
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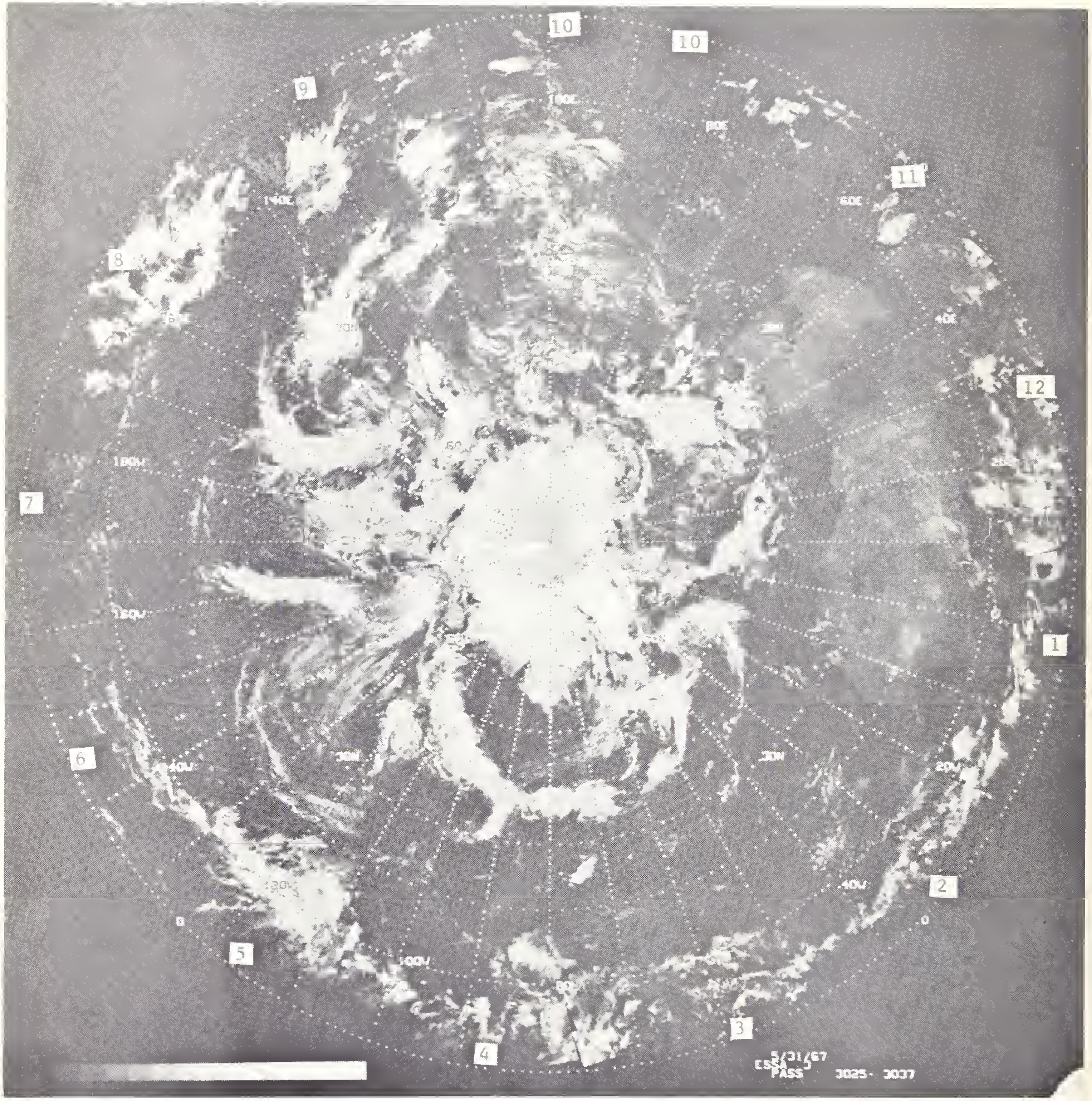
5/30/67
ESSA 5
PASS 0010- 0025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100W
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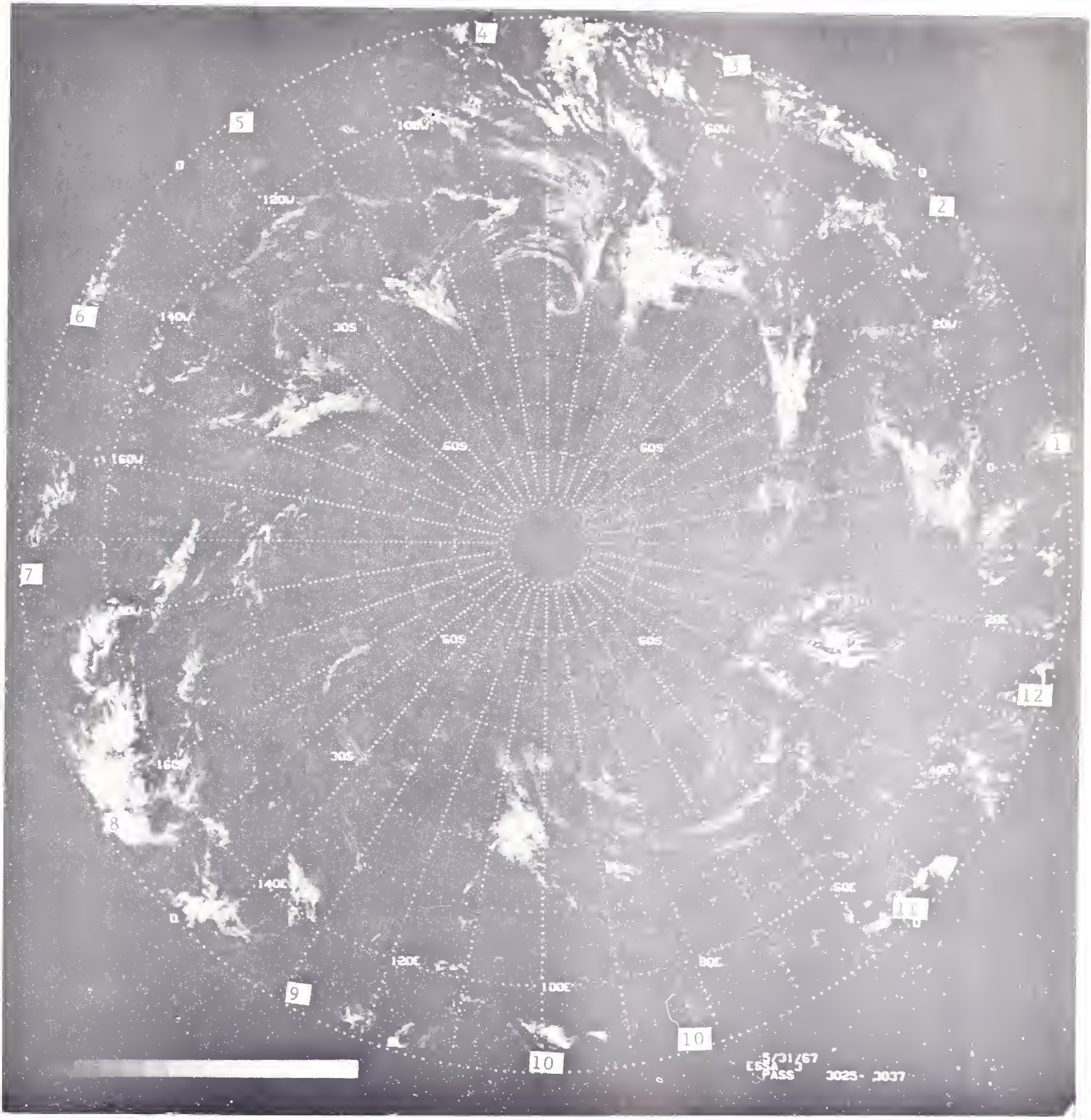
5/31/67
ESSA 5
PASS 3025- 3037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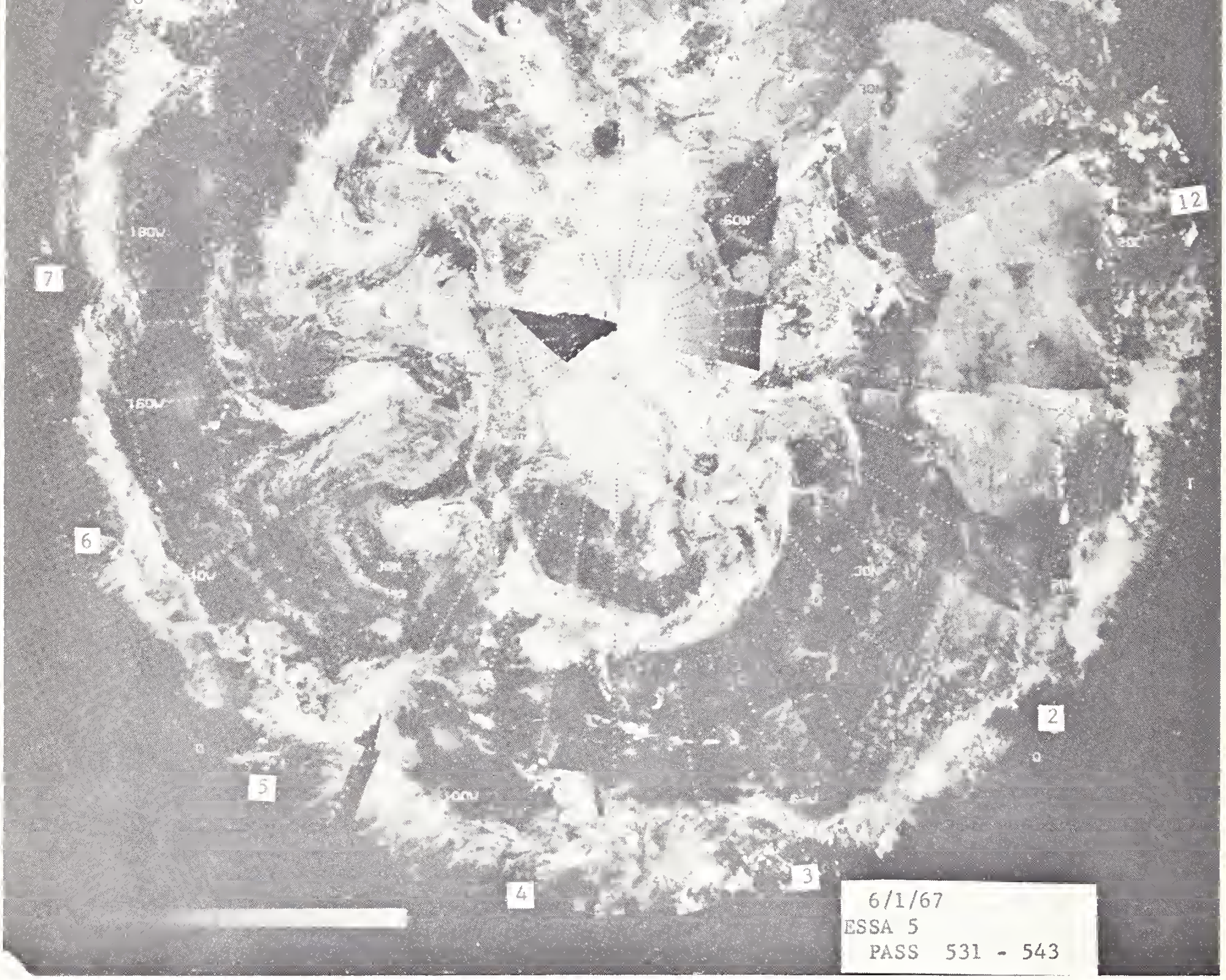
5/31/67
ESSA 3
PASS 3025-3037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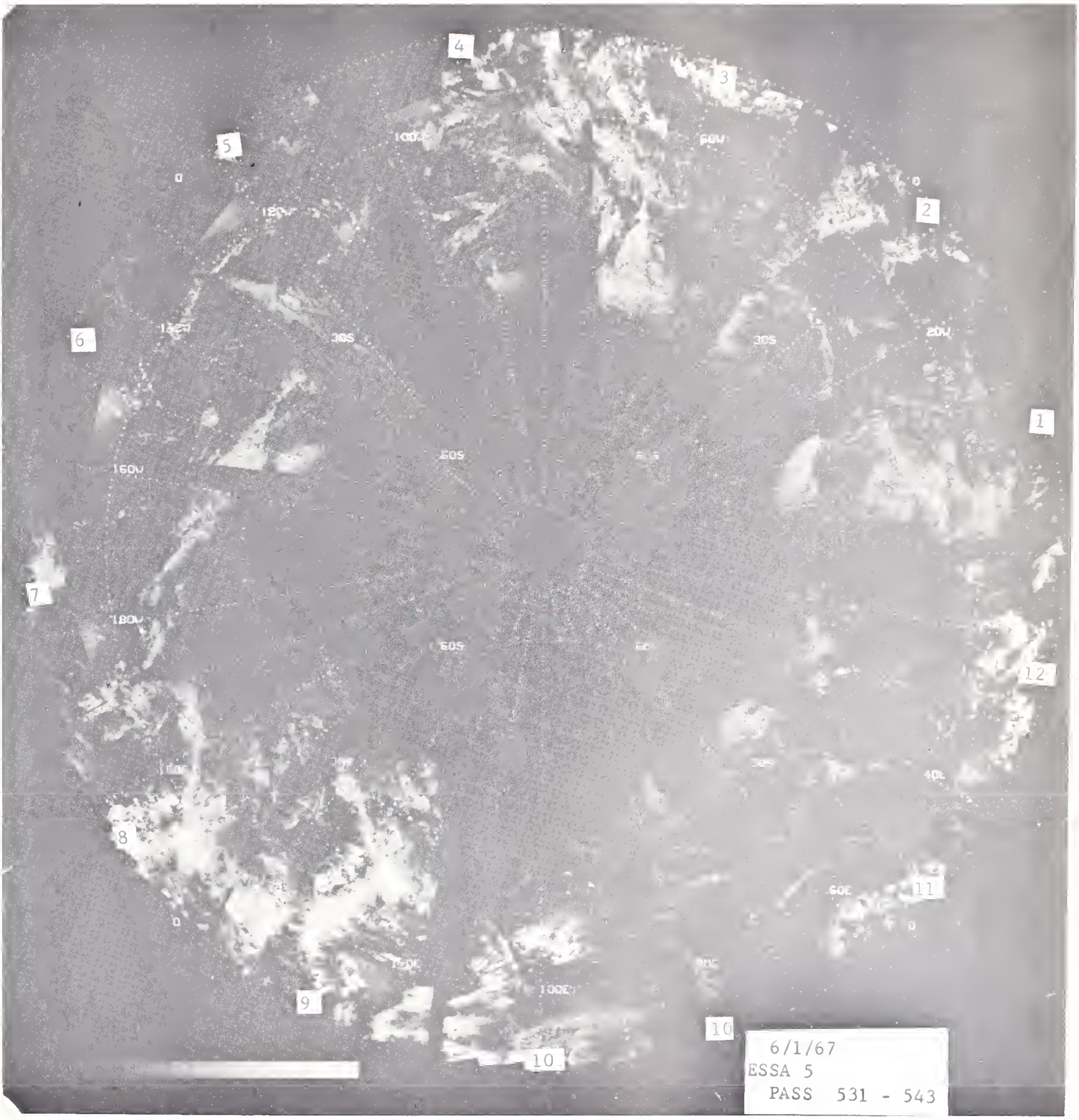
6/1/67
ESSA 5
PASS 531 - 543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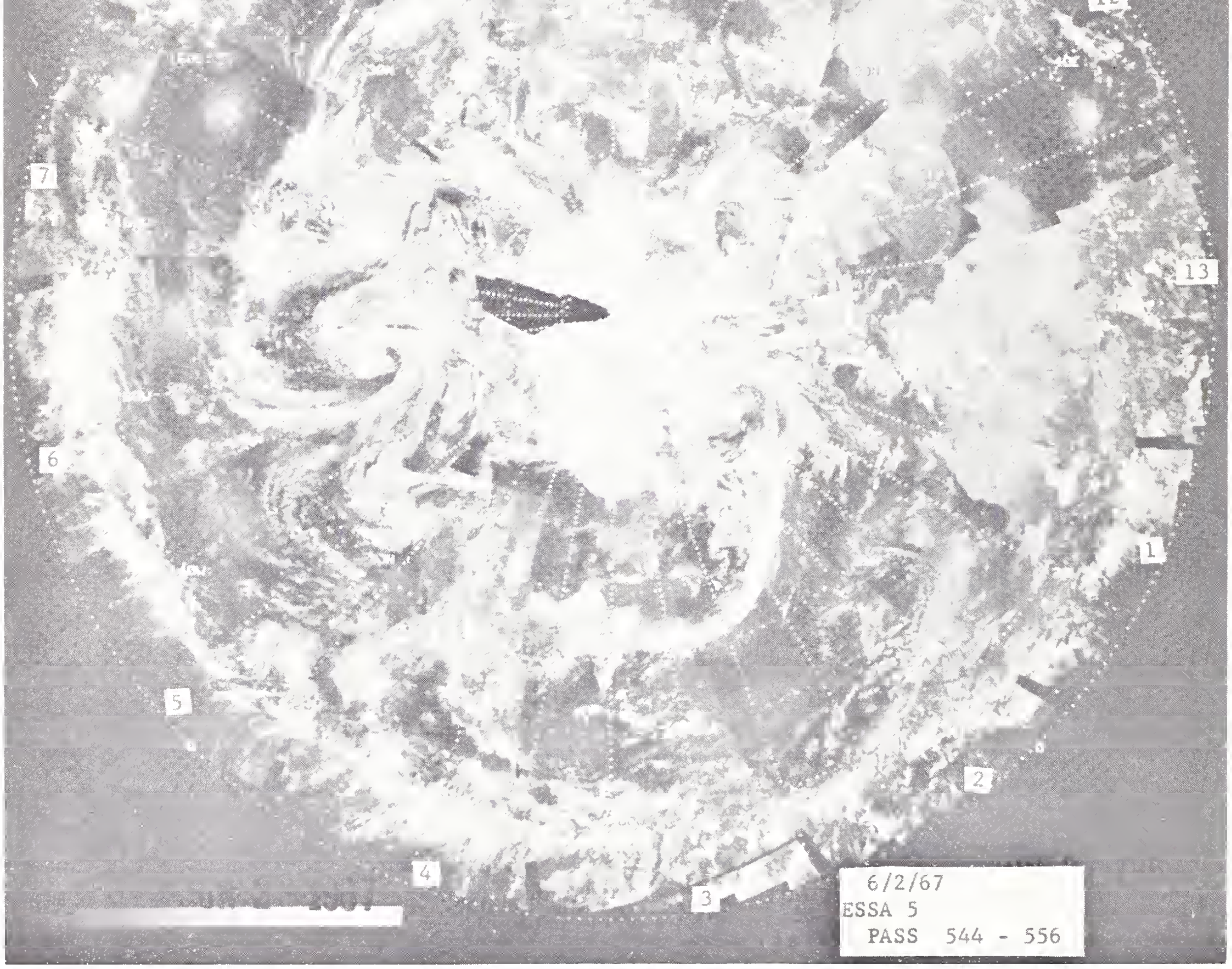
6/1/67
ESSA 5
PASS 531 - 543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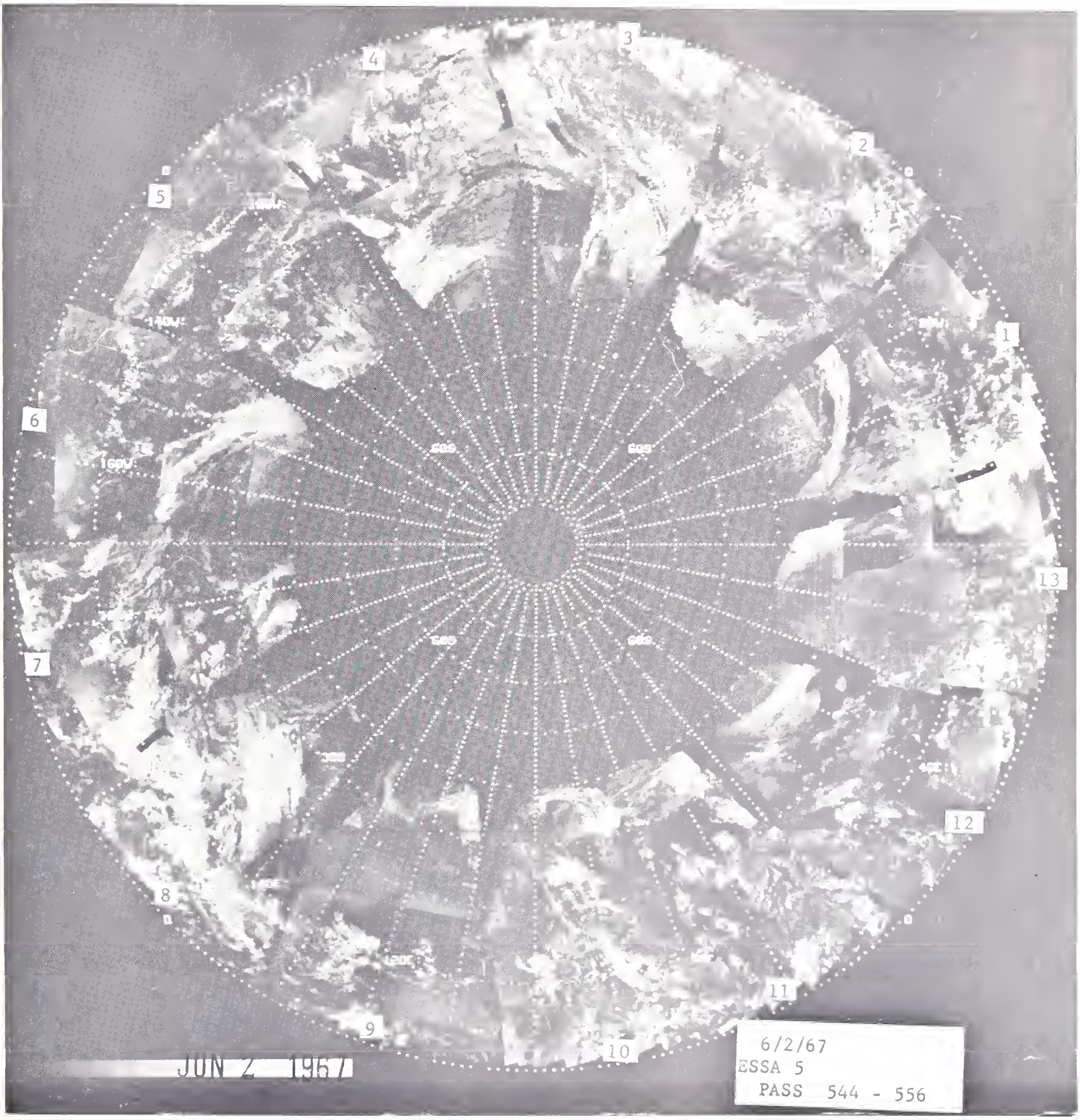
6/2/67
ESSA 5
PASS 544 - 556



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ESSA 5
PASS 544 - 556

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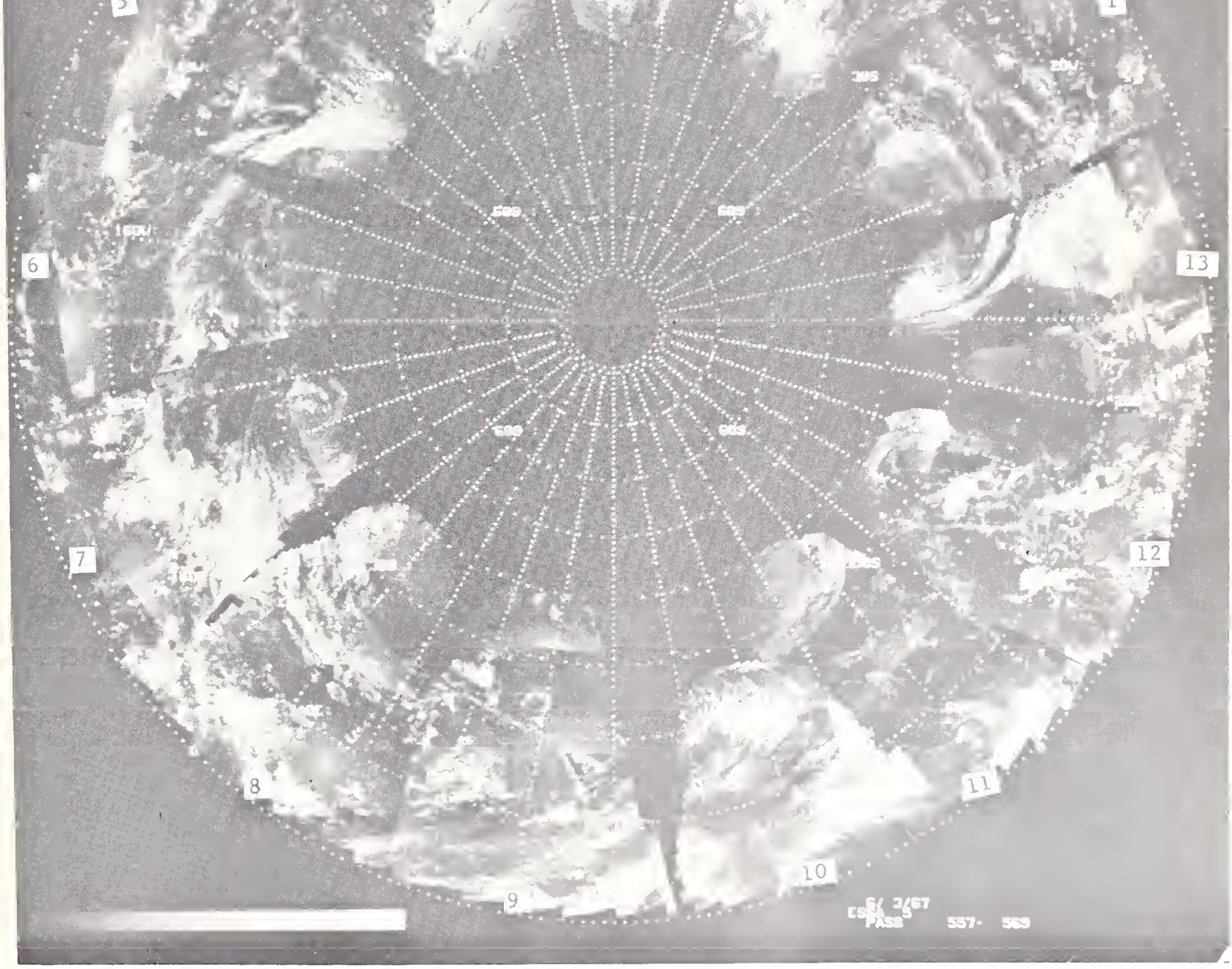
ESSA 5
PASS 557- 569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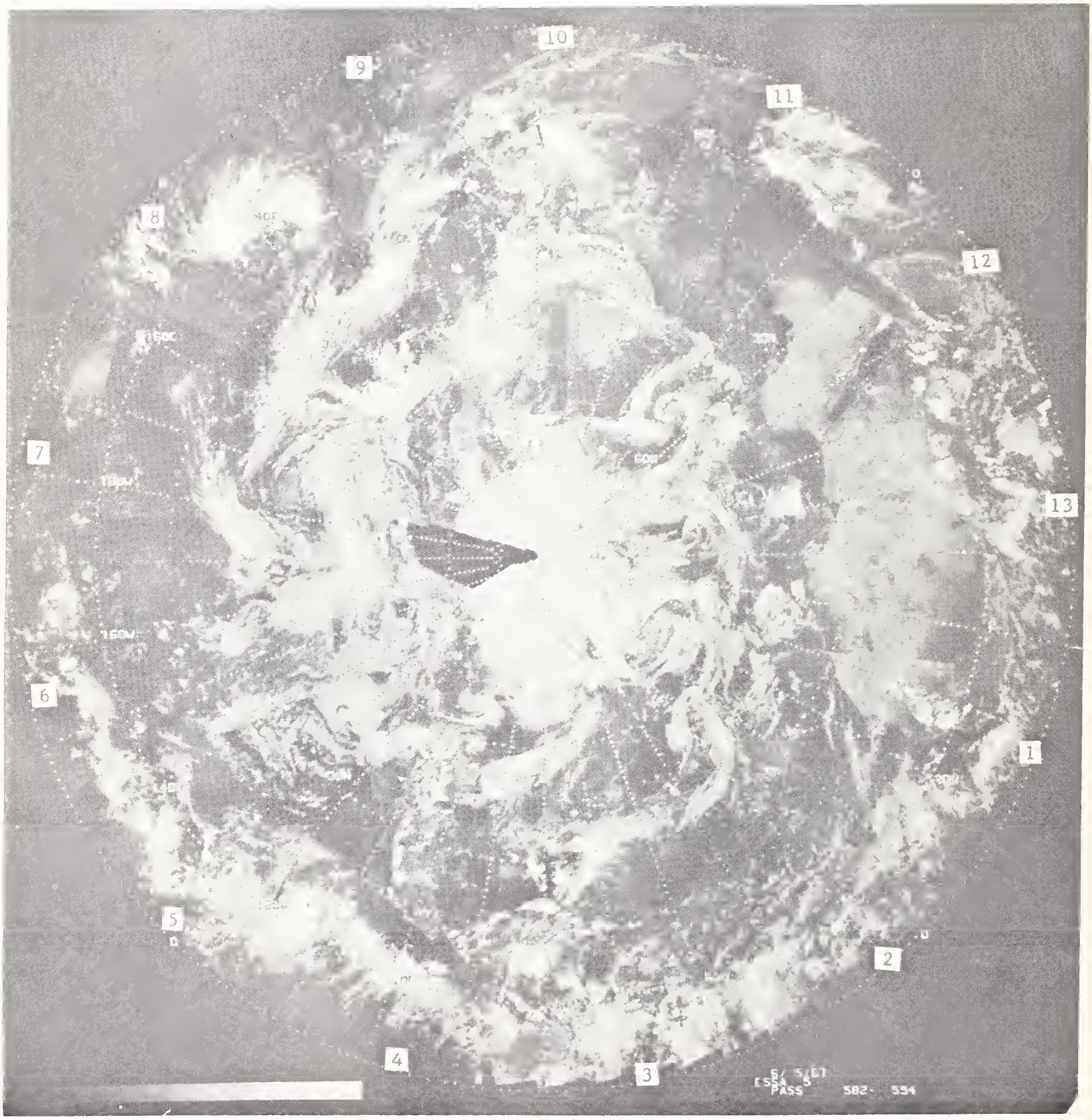
6/ 3/67
ESSA 5
PASS 557- 569

MAJOR COMPUTER
BREAKDOWN. SEE CATALOG
LISTINGS FOR INFORMATION
ON AVAILABILITY OF
FILM FOR THIS DATE

6/4/67
ESSA 5
Pass 570 - 581
No. Hemisphere

MAJOR COMPUTER
BREAKDOWN. SEE CATALOG
LISTINGS FOR INFORMATION
ON AVAILABILITY OF
FILM FOR THIS DATE

6/4/67
ESSA 5
Pass 570 - 581
So. Hemisphere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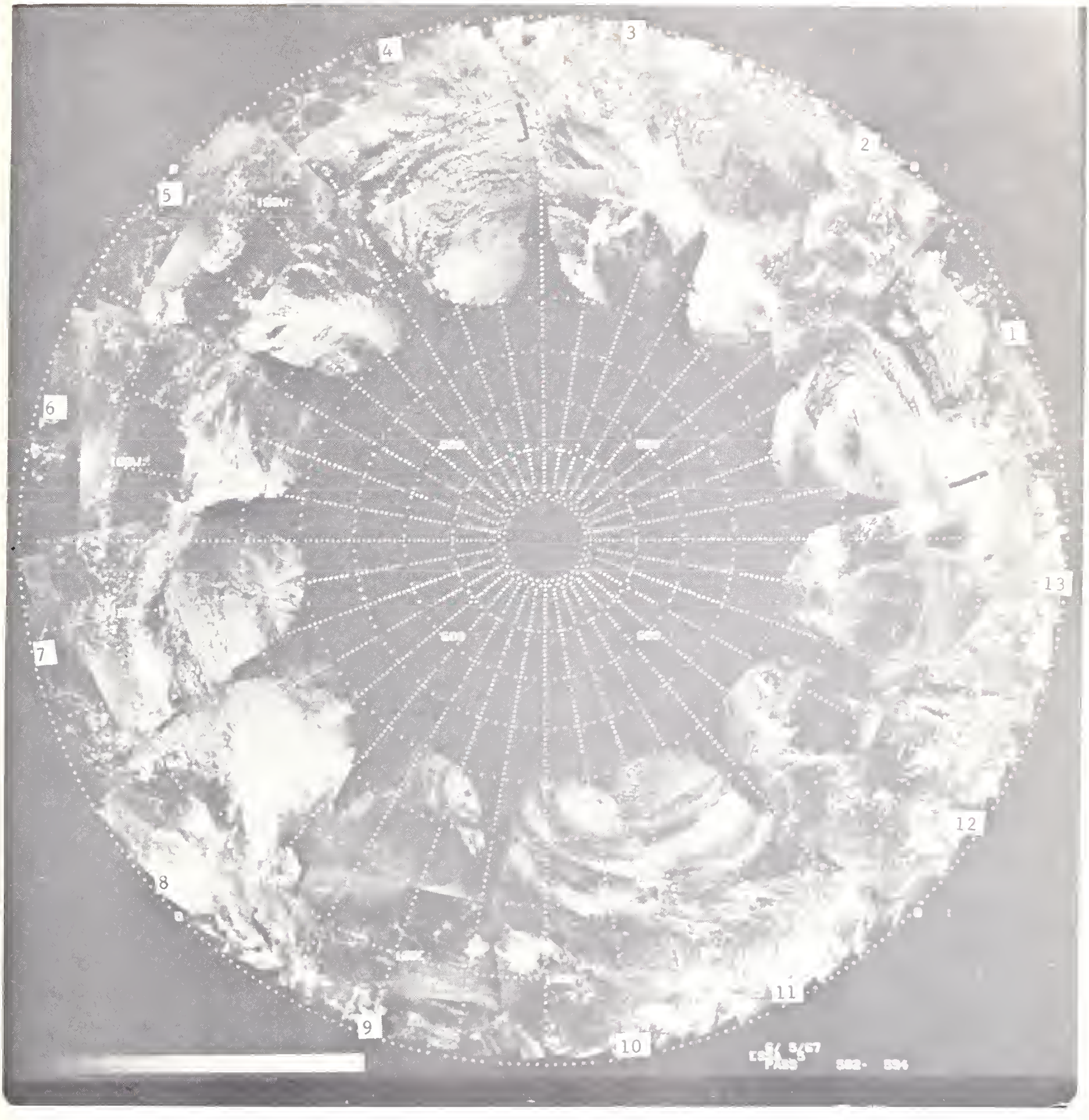
ESSA 5
PASS 582- 594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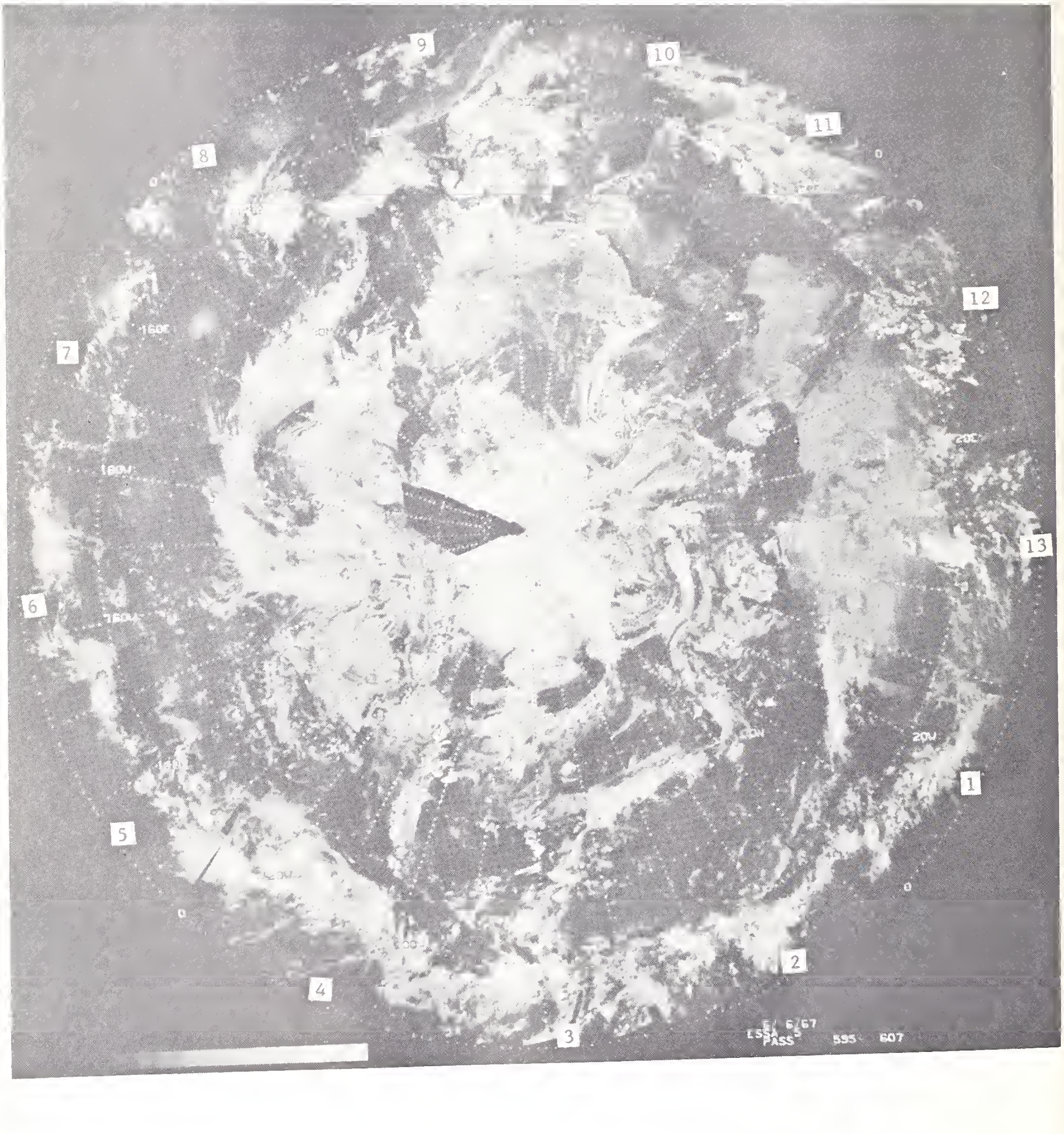
ESSA 5
PASS 582- 594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160E
7
20W
20E
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20W
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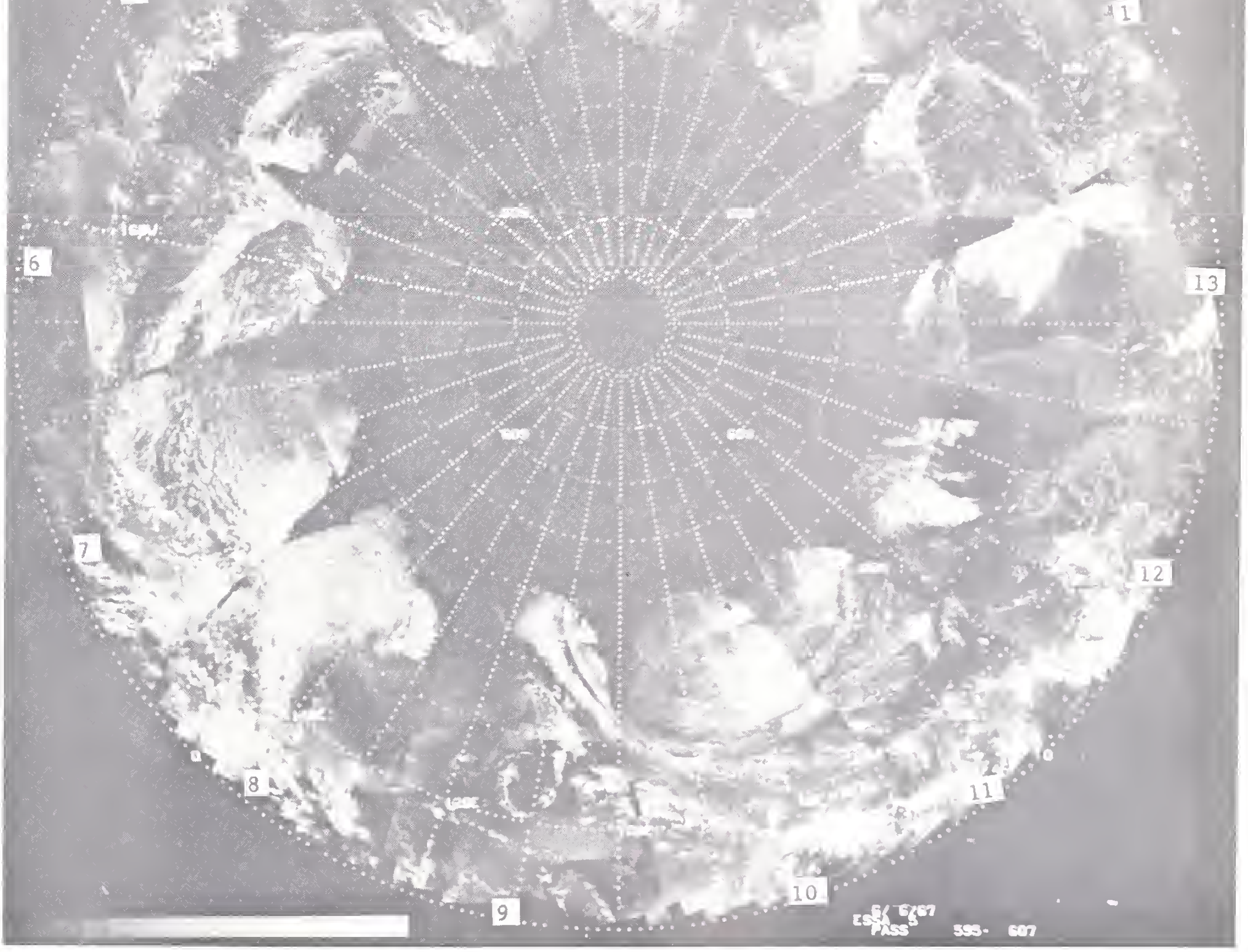
0
2
4
3
E/ 6/67
ESSA 5
PASS 595 607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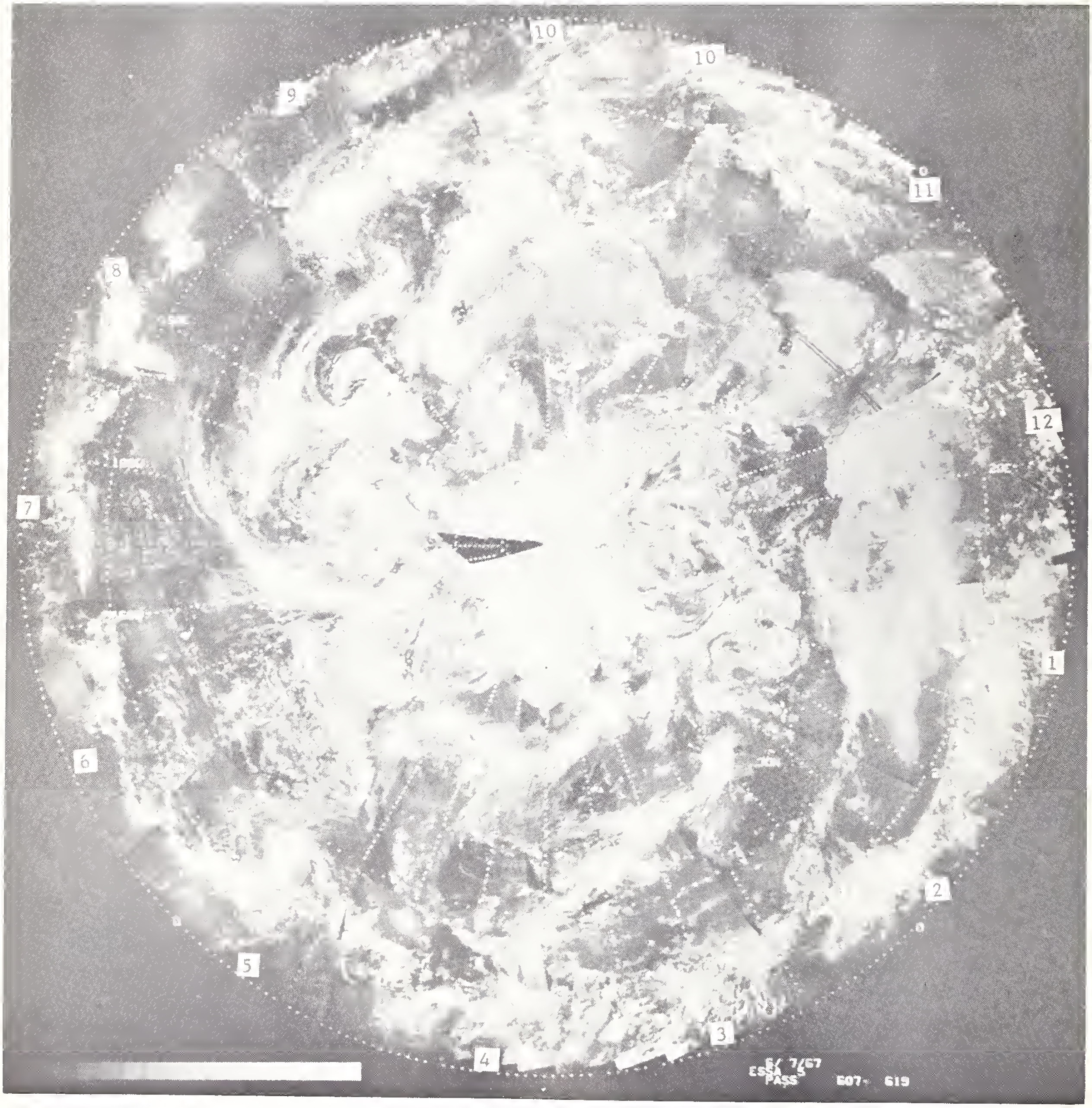
10
9
6/ 6/67
ESSA 5
PASS 595- 607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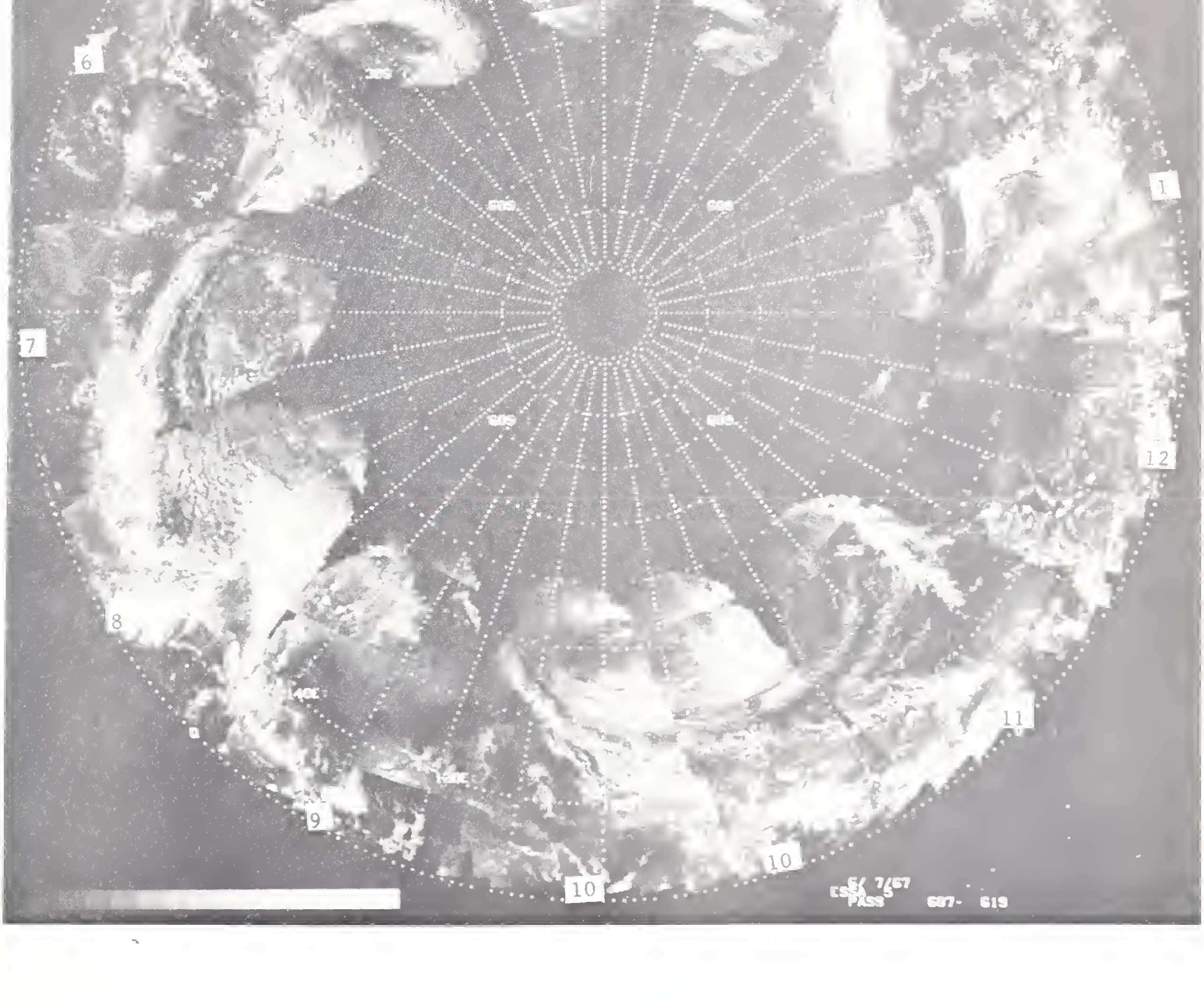
6/ 7/67
ESSA 5
PASS 607- 619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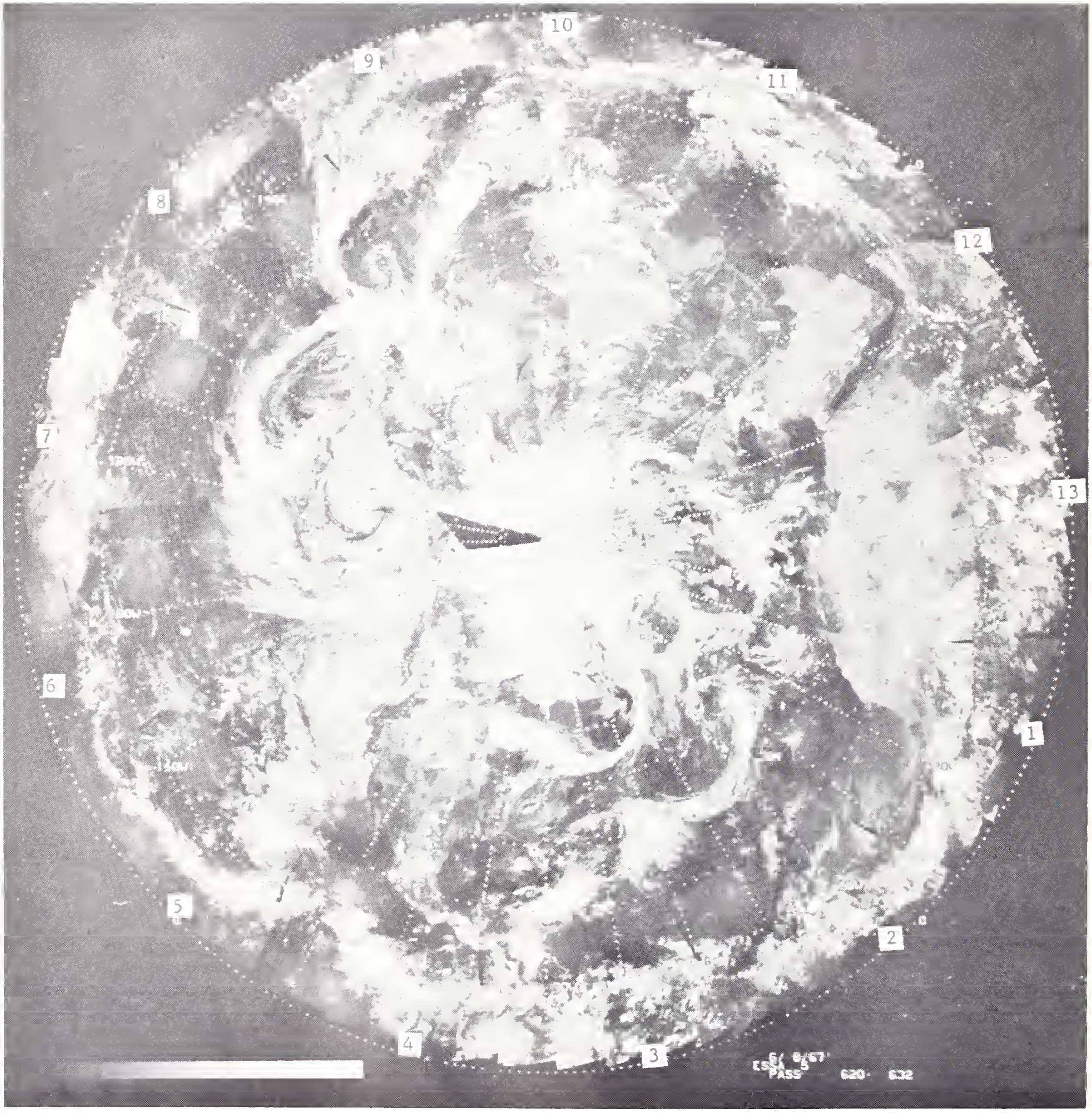
10
6/ 7/67
ESSA 5
PASS 607- 619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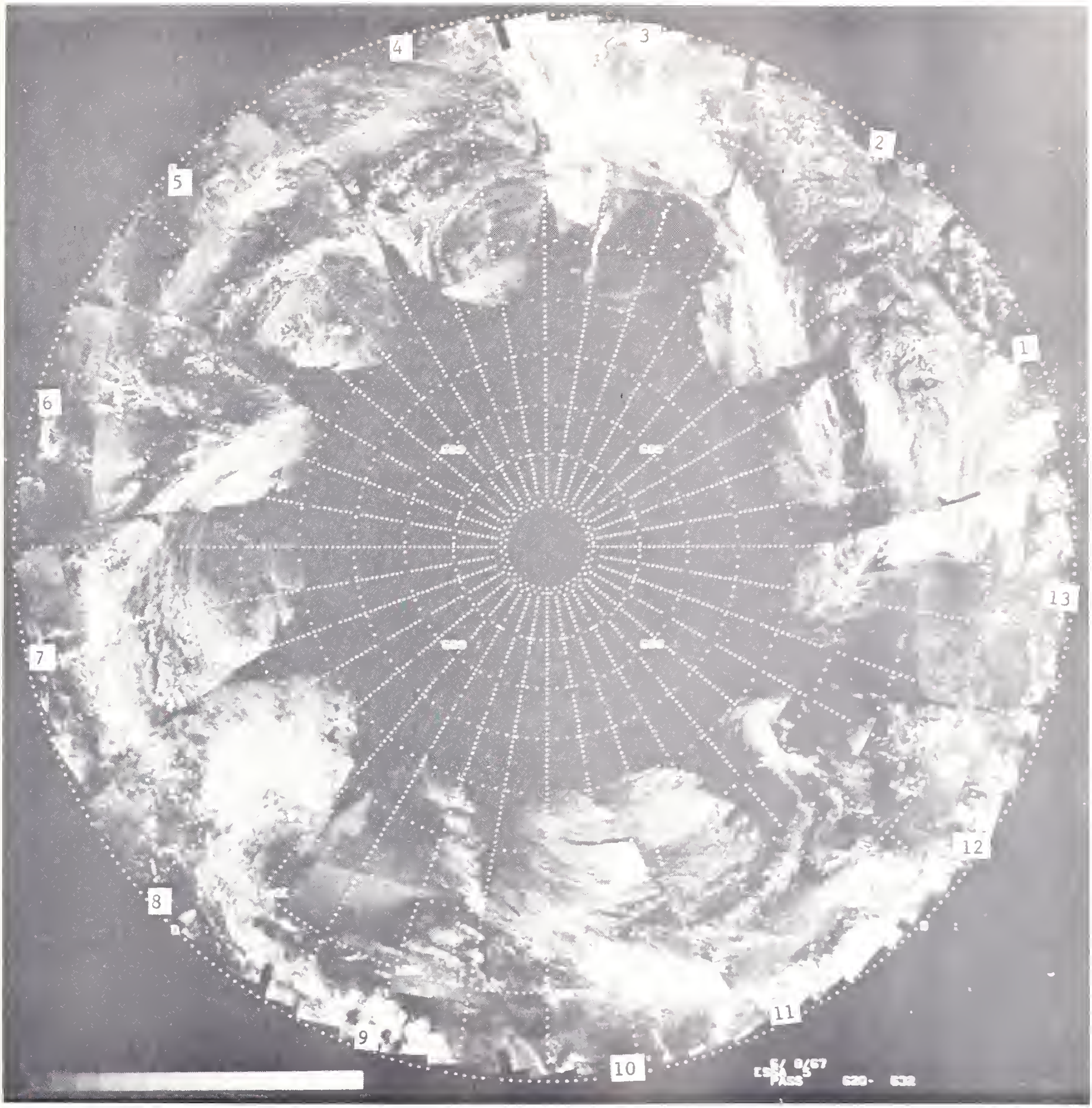
5/ 8/67
ESSA 5
PASS 620- 632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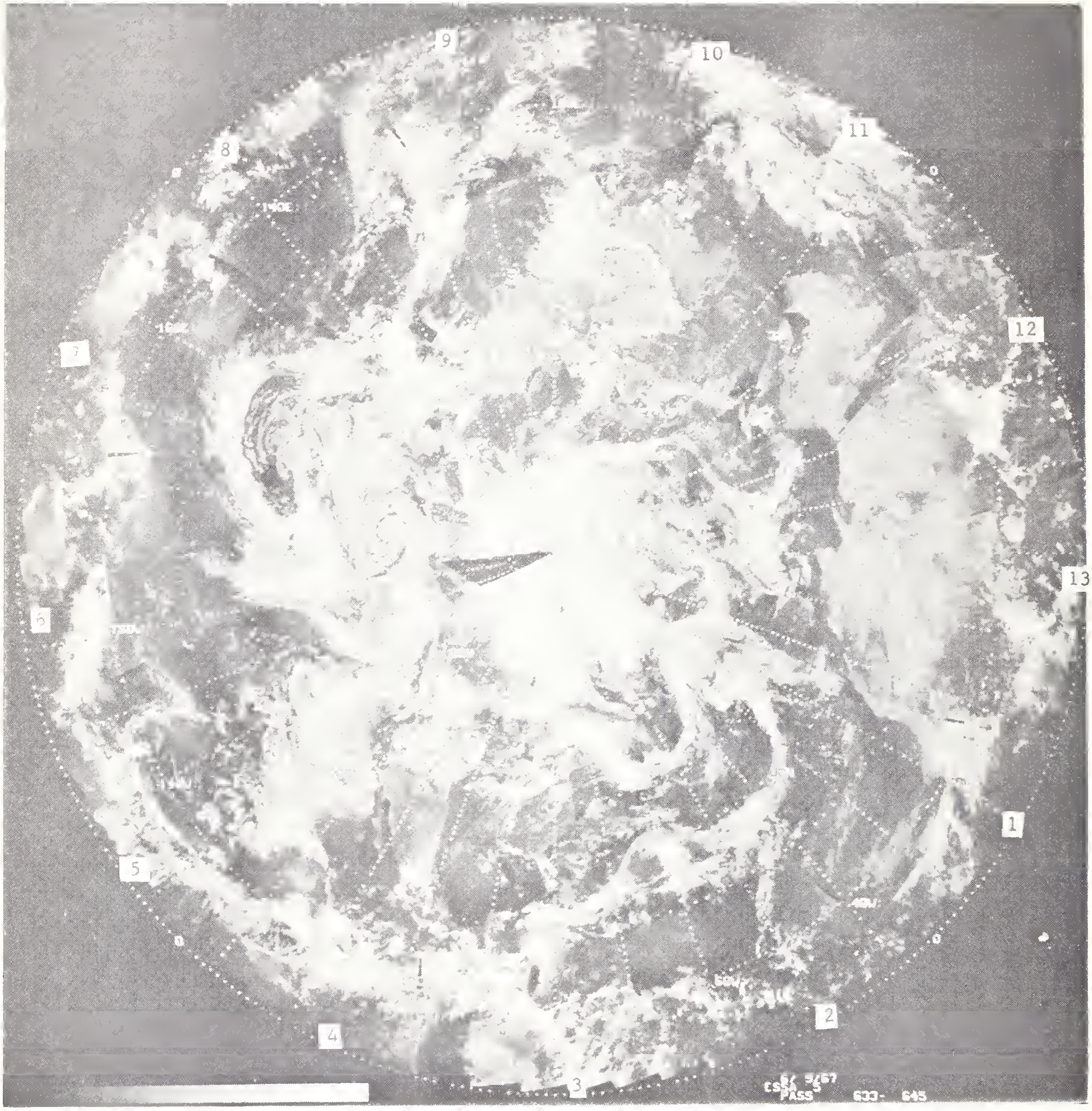
9
10
6/ 8/67
ESSA 5
PASS 620- 632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8
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140E
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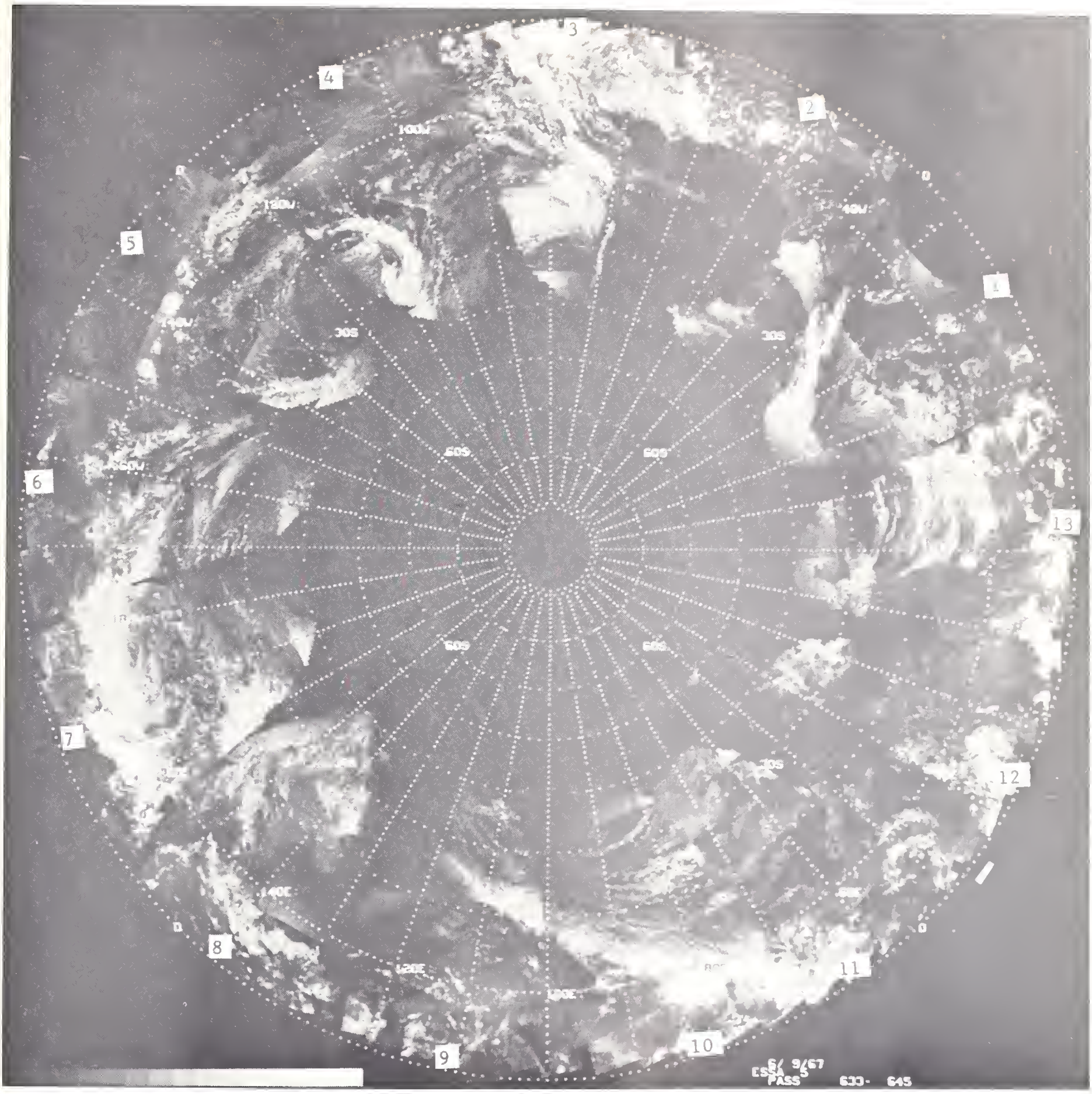
13
6
1
5
2
4
3
6/ 9/67
ESSA 5
PASS 633- 645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100W
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120W
40W
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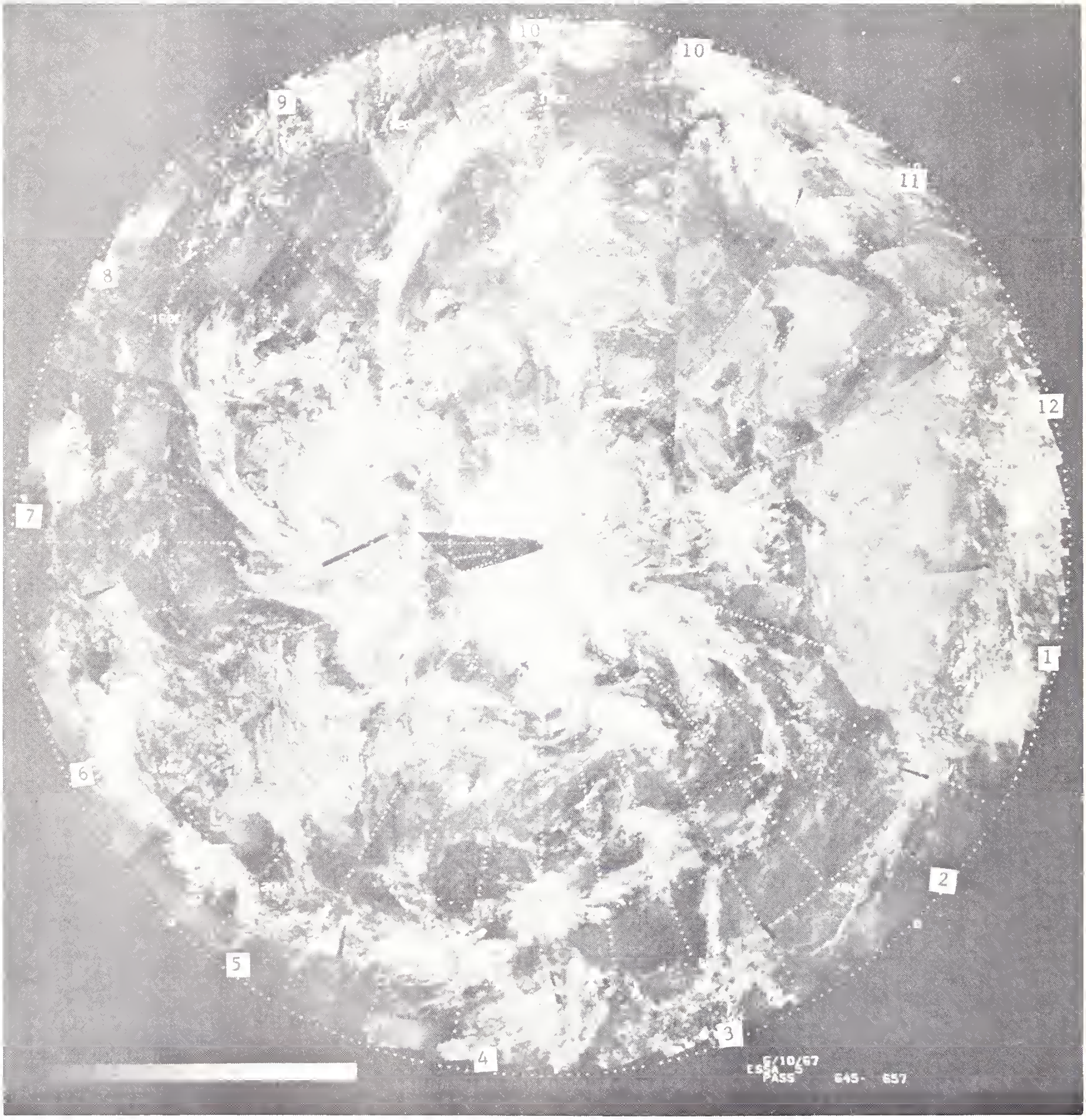
5
1
140W
30S
30S
60S
60S
6
160W
13
60S
60S
7
30S
12
140E
60E
0
0
8
11
120E
80E
100E
10
9
6/ 9/67
ESSA 5
PASS 633- 645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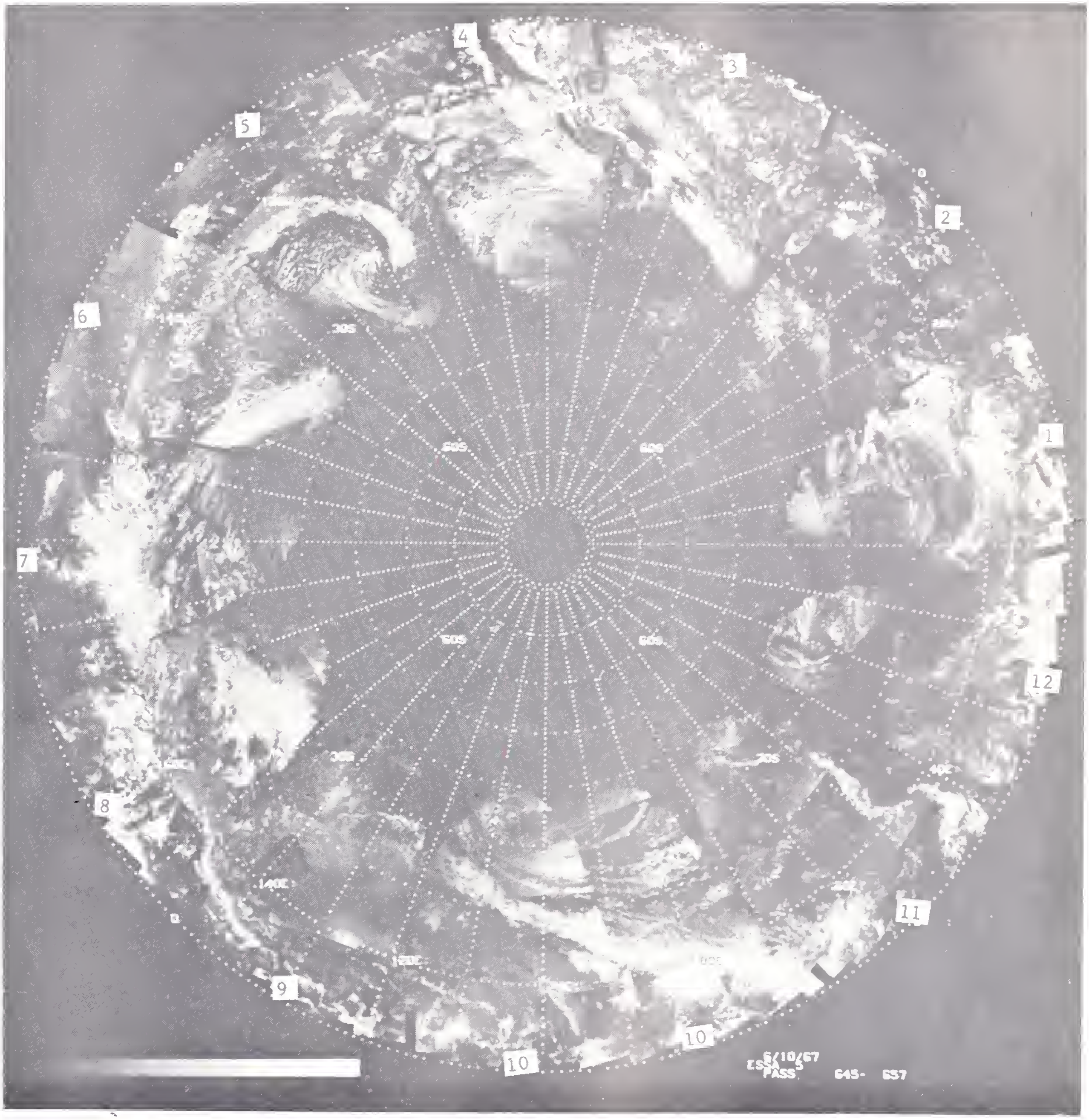
4
6/10/67
ESSA 5
PASS 645- 657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40W
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30S
60S
60S
1
7
60S
60S
12
30S
30S
40E
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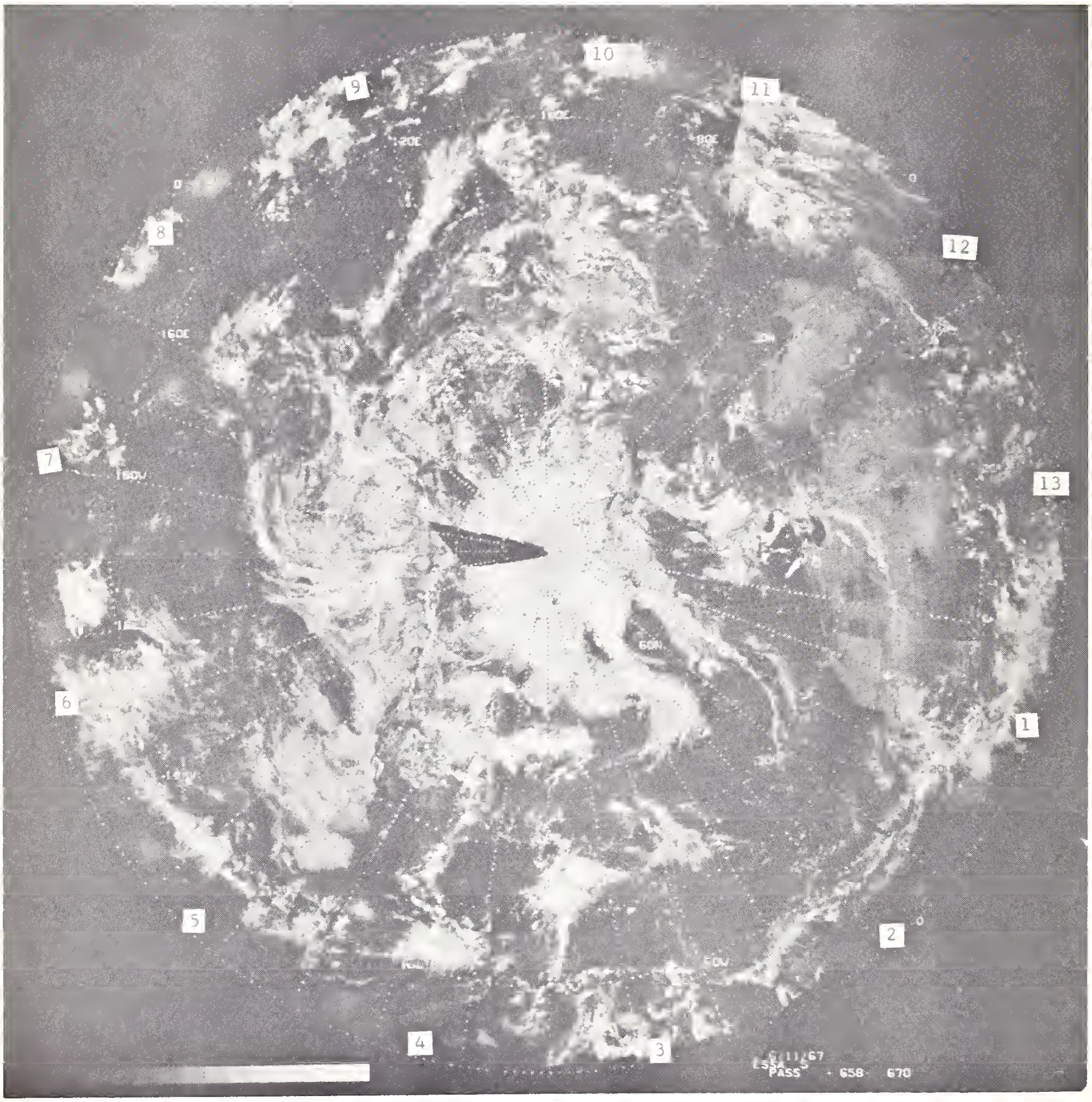
140E
11
120E
9
10
10
6/10/67
ESSA 5
PASS 645- 657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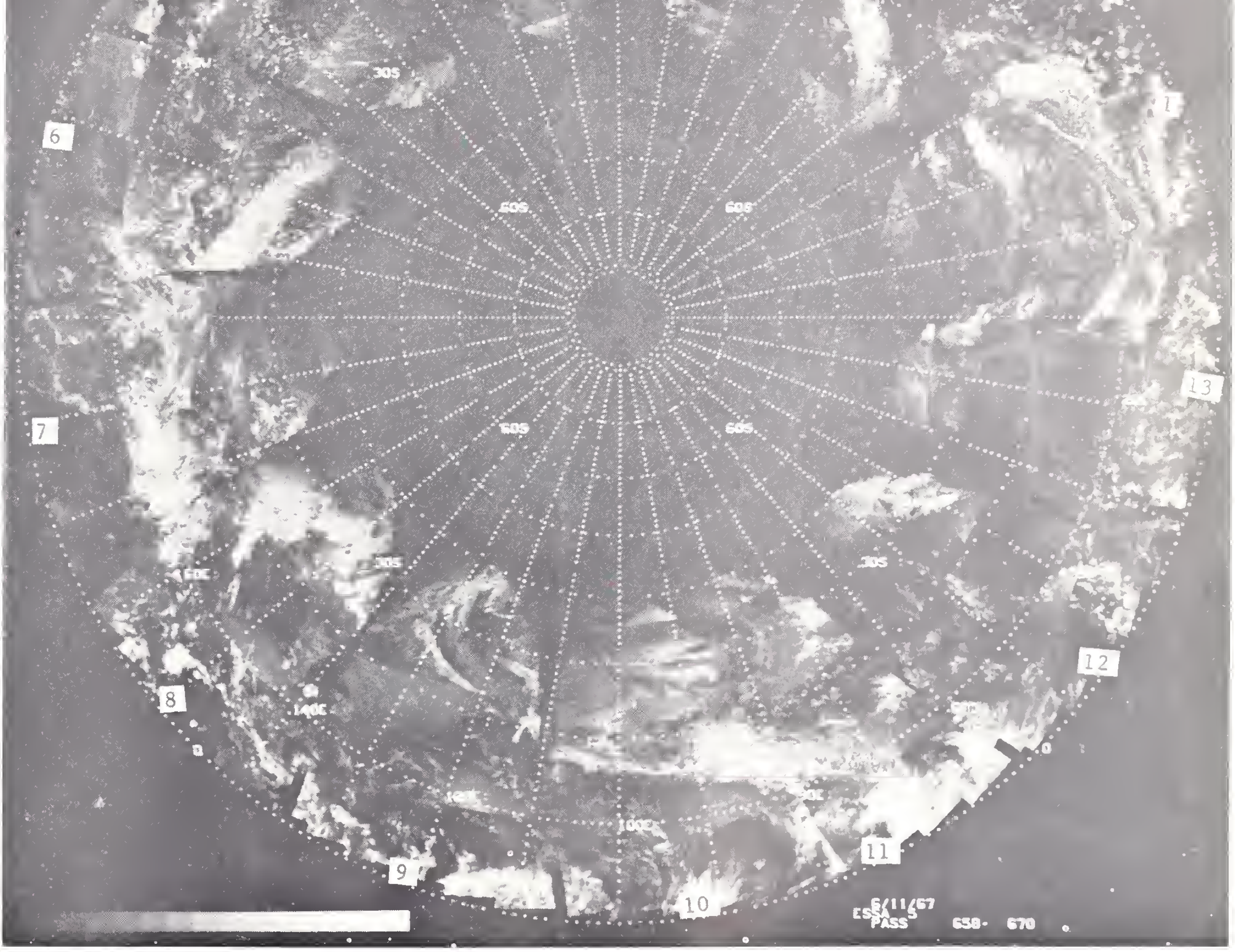
160E
120E
100E
80E
180W
60N
6/11/67
ESSA 5
PASS 658 670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80W
60W
40W
120W
30S
60S
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30S
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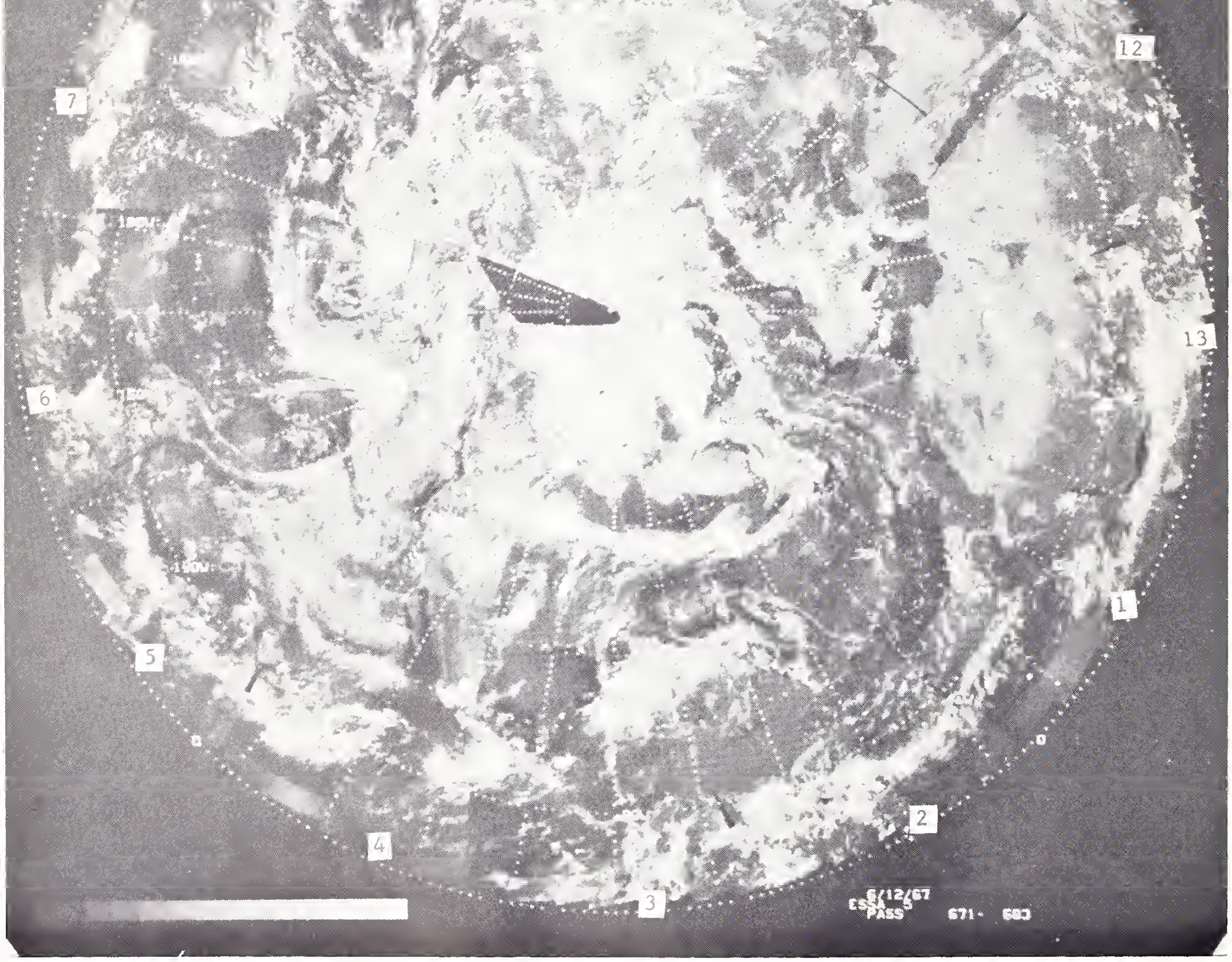
140E
120E
100E
80E
6/11/67
ESSA 5
PASS 658- 670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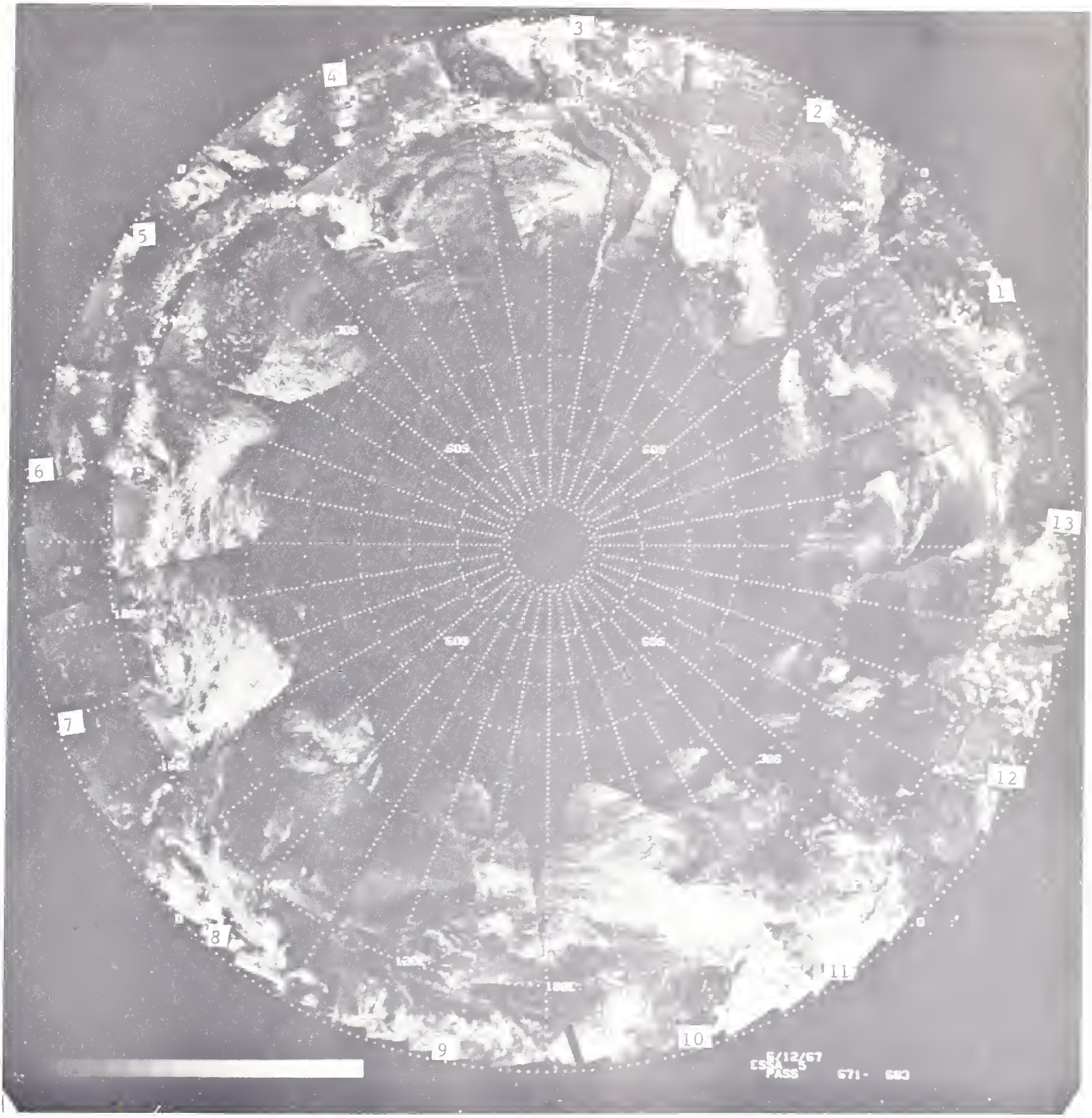
160E
180W
160W
140W
6/12/67
ESSA 5
PASS 671- 683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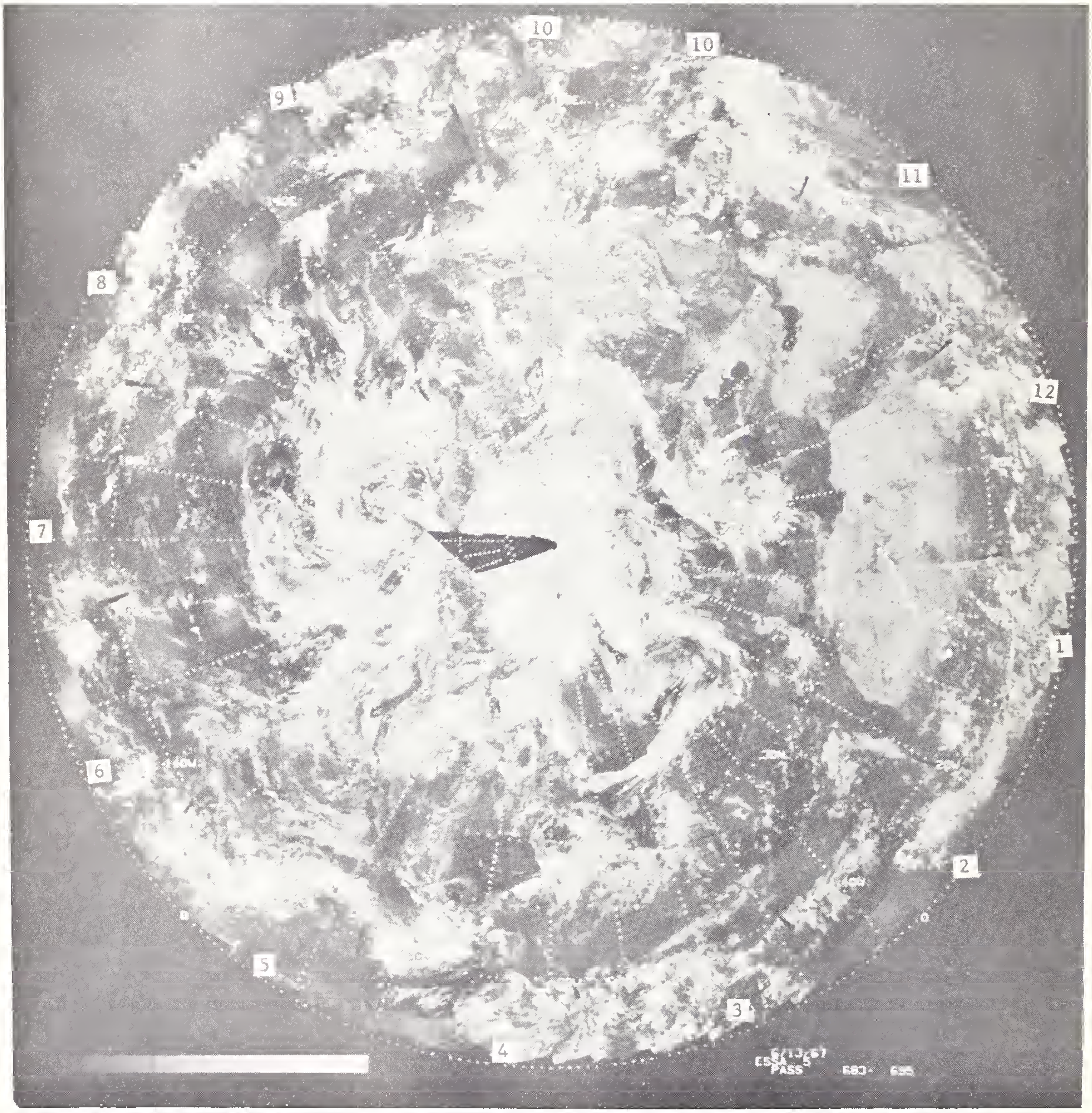
30S
60S
60S
60S
60S
30S
180
120
0
6/12/67
ESSA 5
PASS
671- 683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140W
20N
20W
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40N
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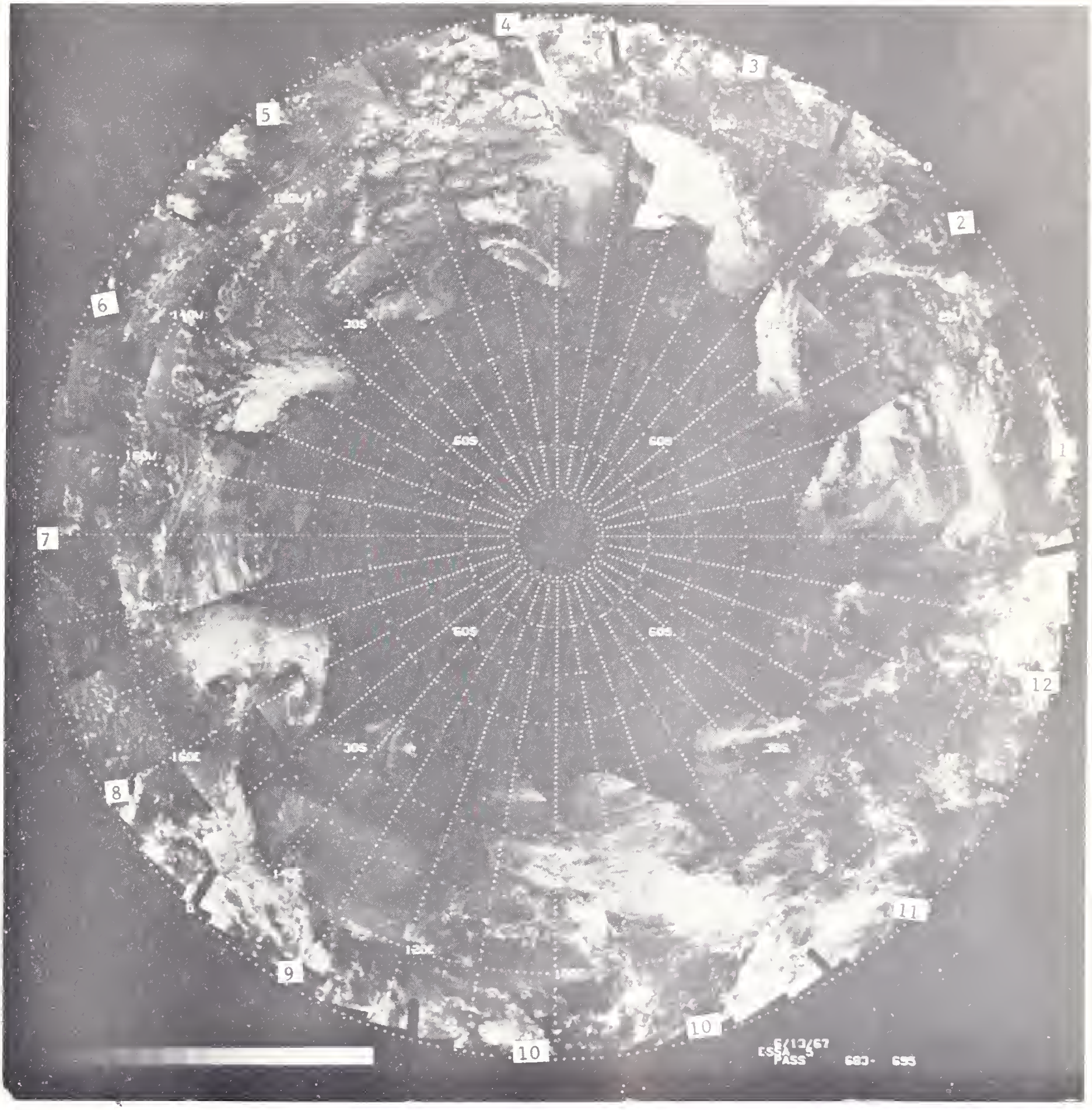
4
6/13/67
ESSA 5
PASS
683-
695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140W
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20W
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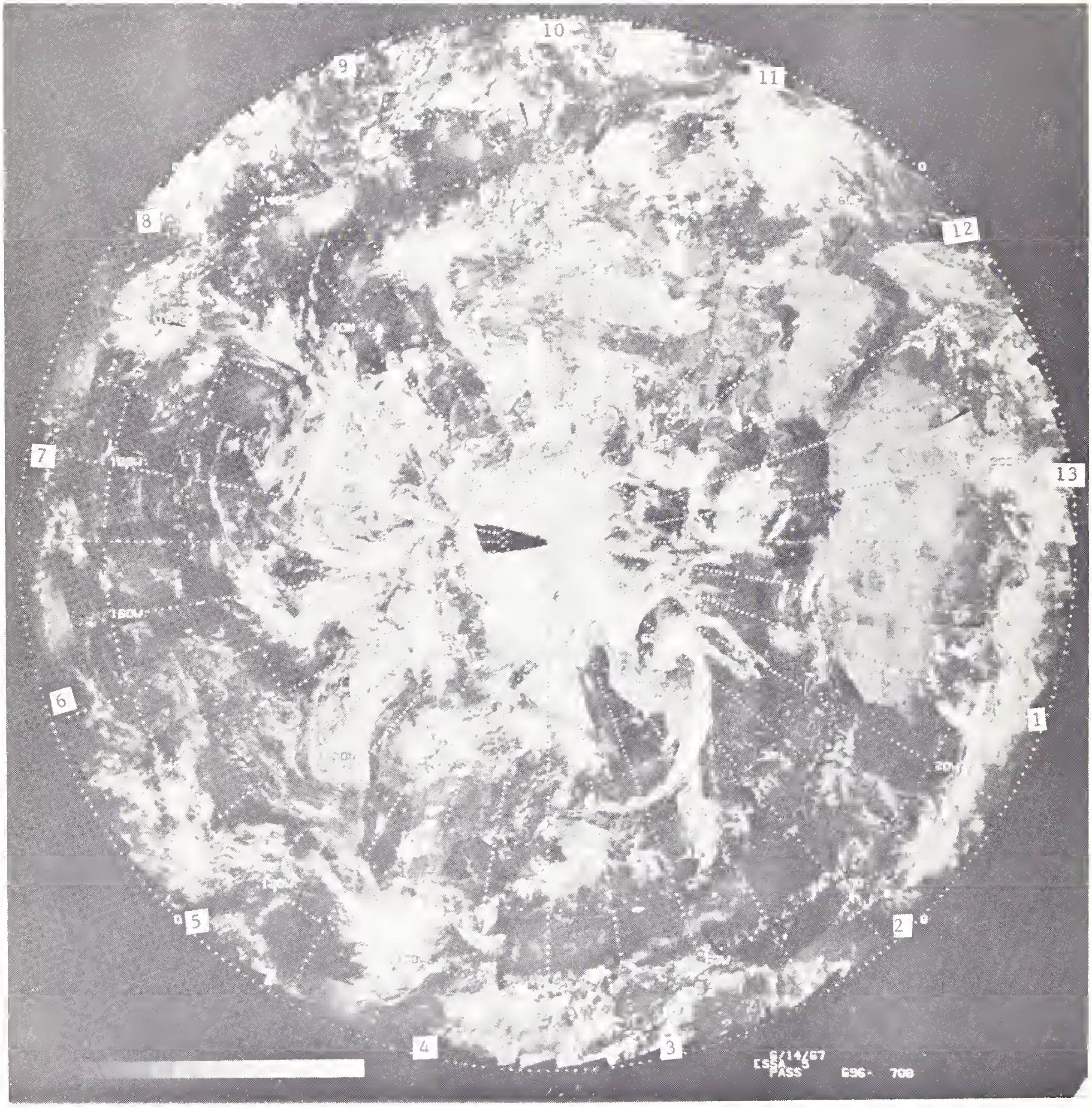
60S
1
160W
7
60S
60S
12
160E
30S
30S
8
140E
11
120E
9
100E
10
10
6/13/67
ESSA 5
PASS 683- 695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1
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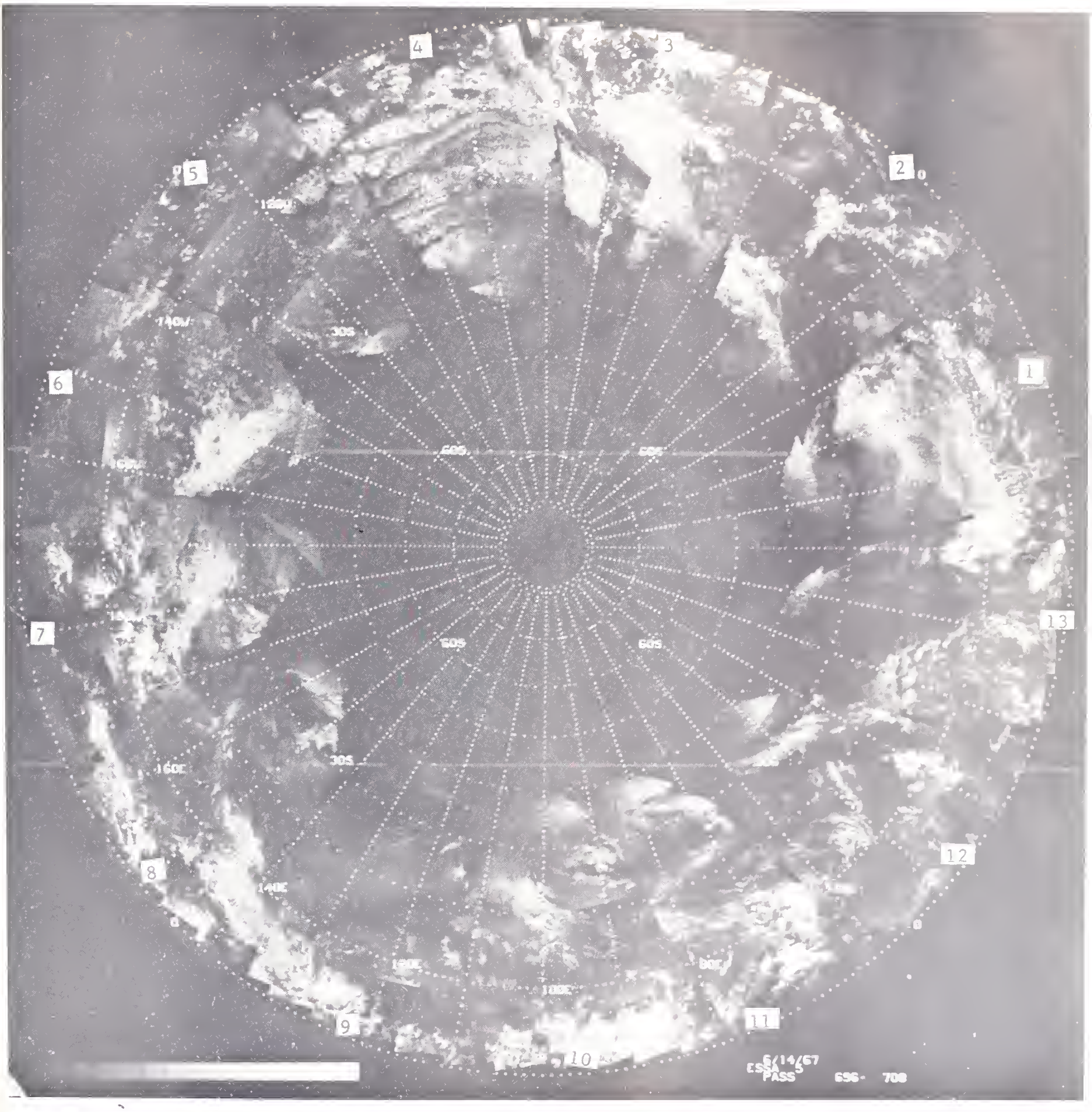
3
6/14/67
ESSA 5
PASS 696- 708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120W
140W
30S
6
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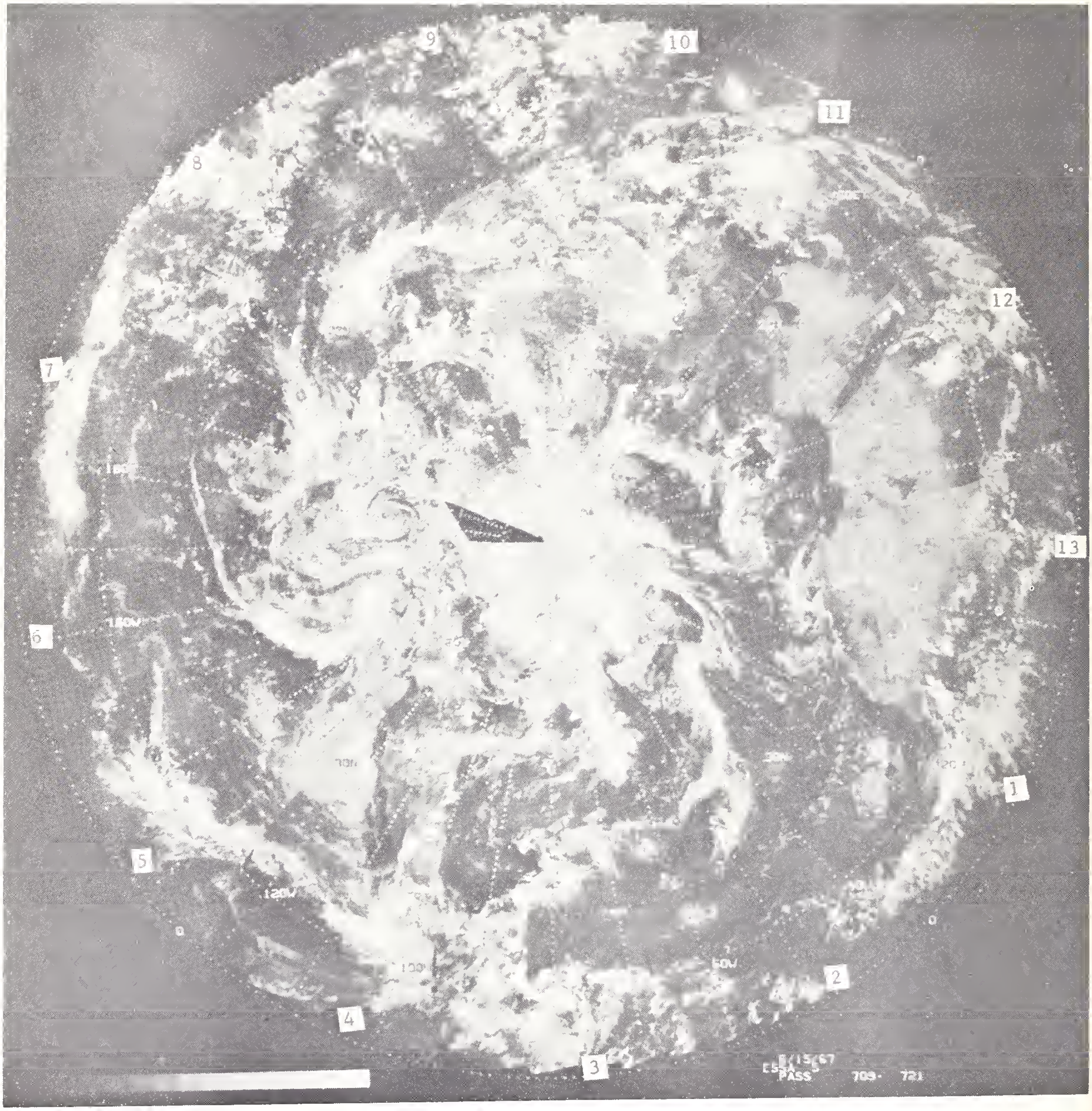
60S
60S
160W
7
13
60S
60S
30S
160E
12
8
140E
120E
100E
80E
9
11
10
6/14/67
ESSA 5
PASS 696- 708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180
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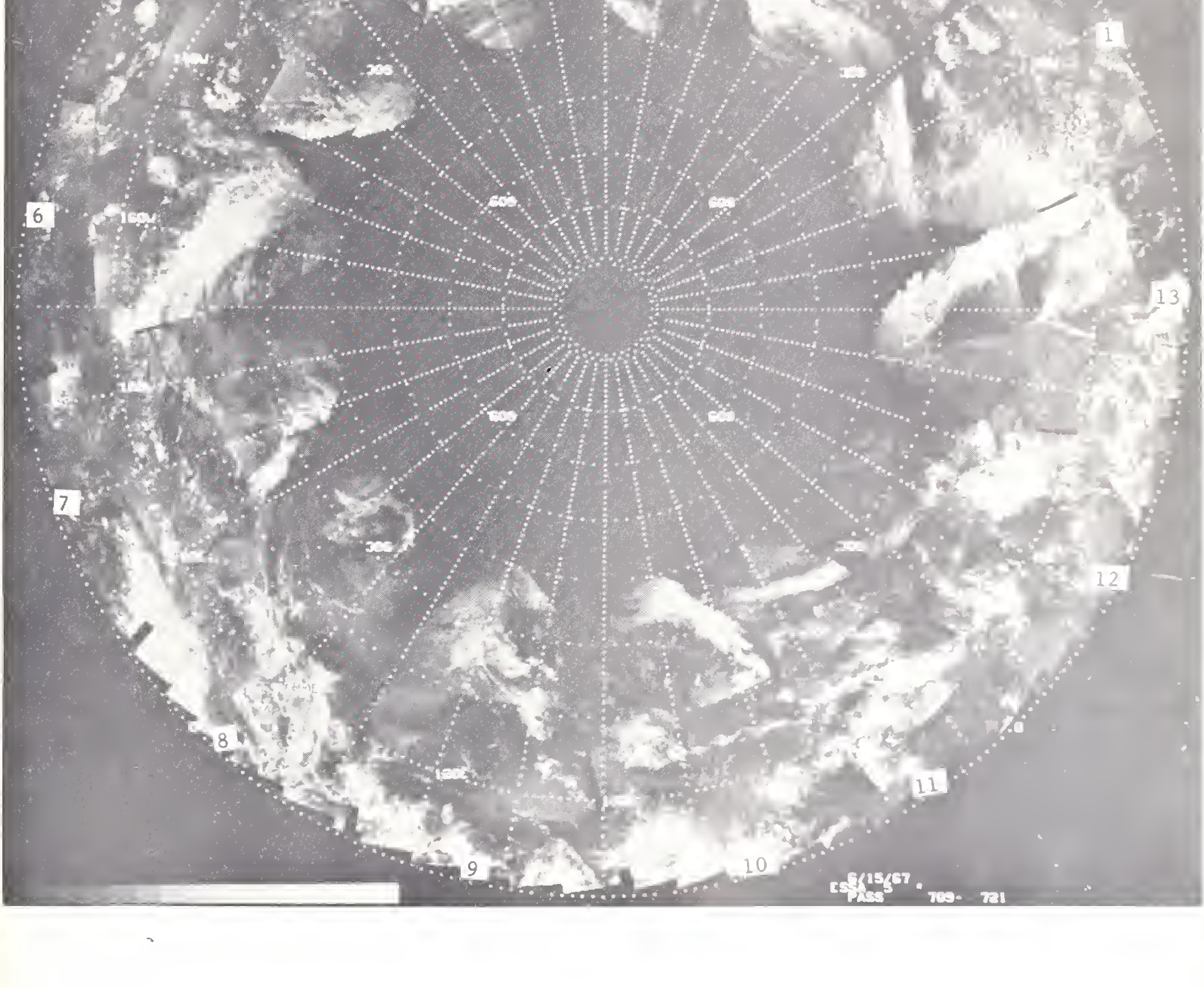
6
150W
1
5
120W
2
4
3
60W
8/15/67
ESSA 5
PASS 709- 721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12
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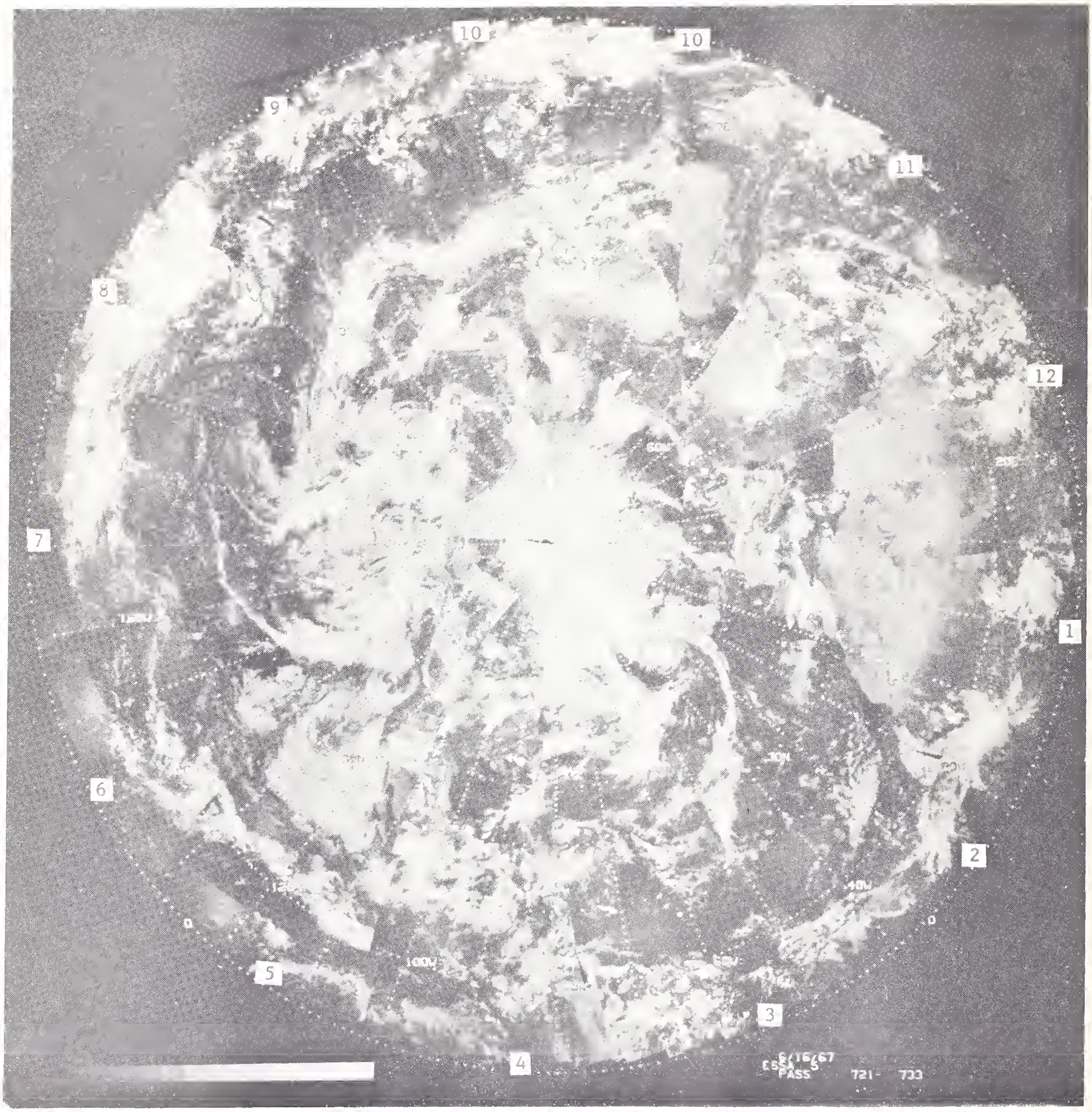
11
9
10
6/15/67
ESSA 5
PASS 709- 721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160W
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30N
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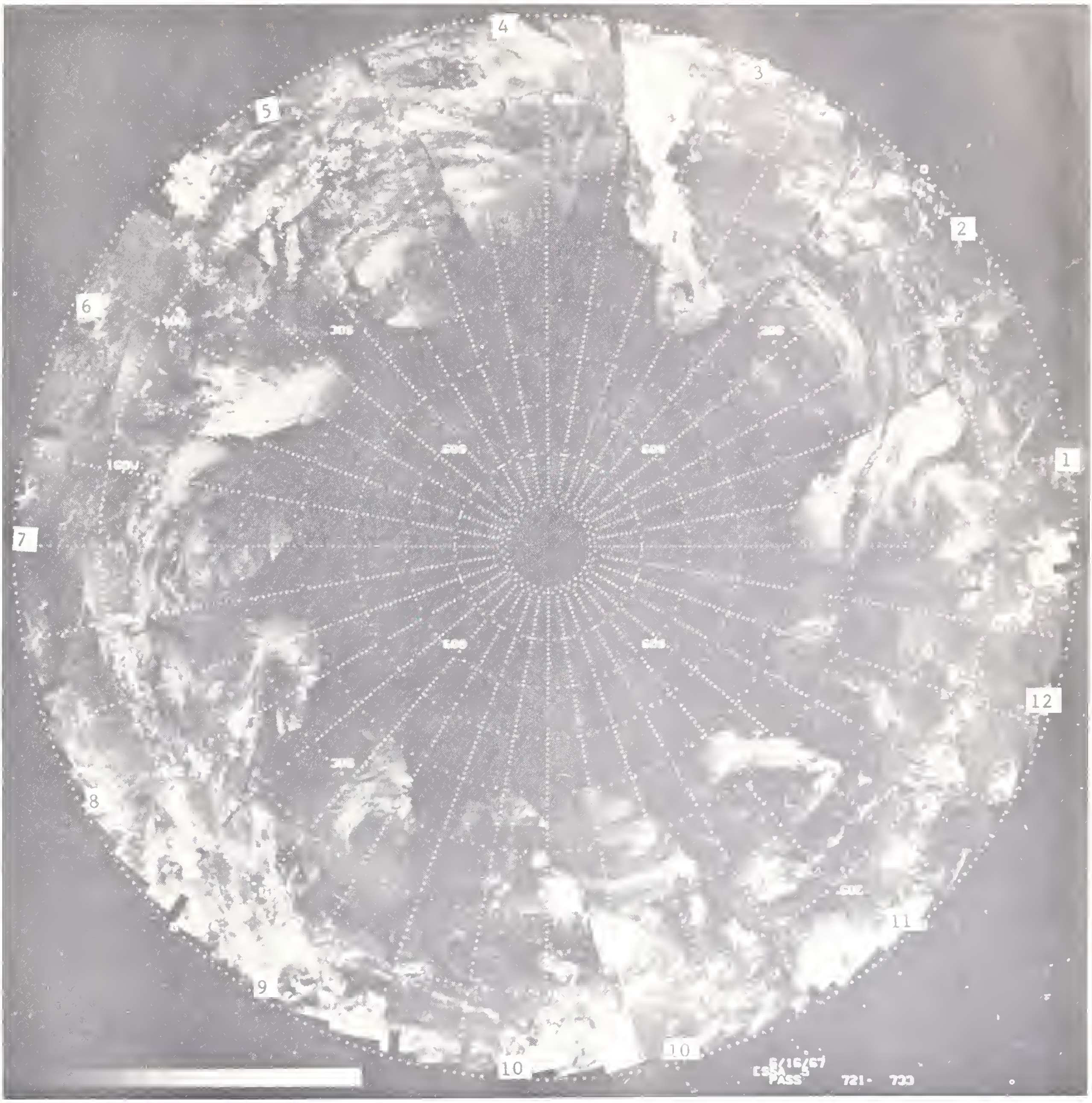
2
40W
0
0
5
100W
60W
3
4
6/16/67
ESSA 5
PASS 721- 733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30S
30S
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60S
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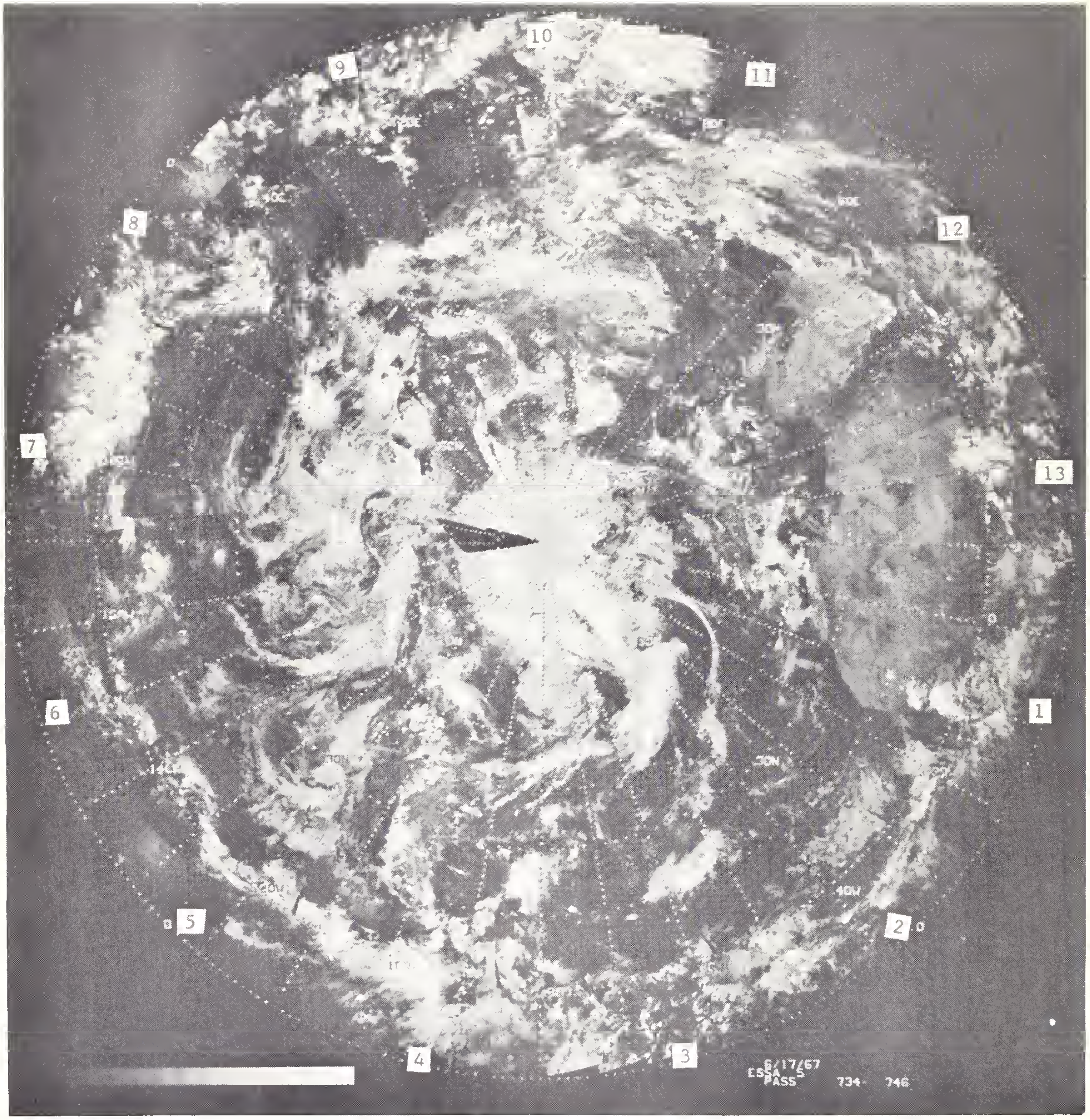
60S
60S
12
8
30S
11
9
10
10
6/16/67
ESSA 5
PASS 721- 733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1
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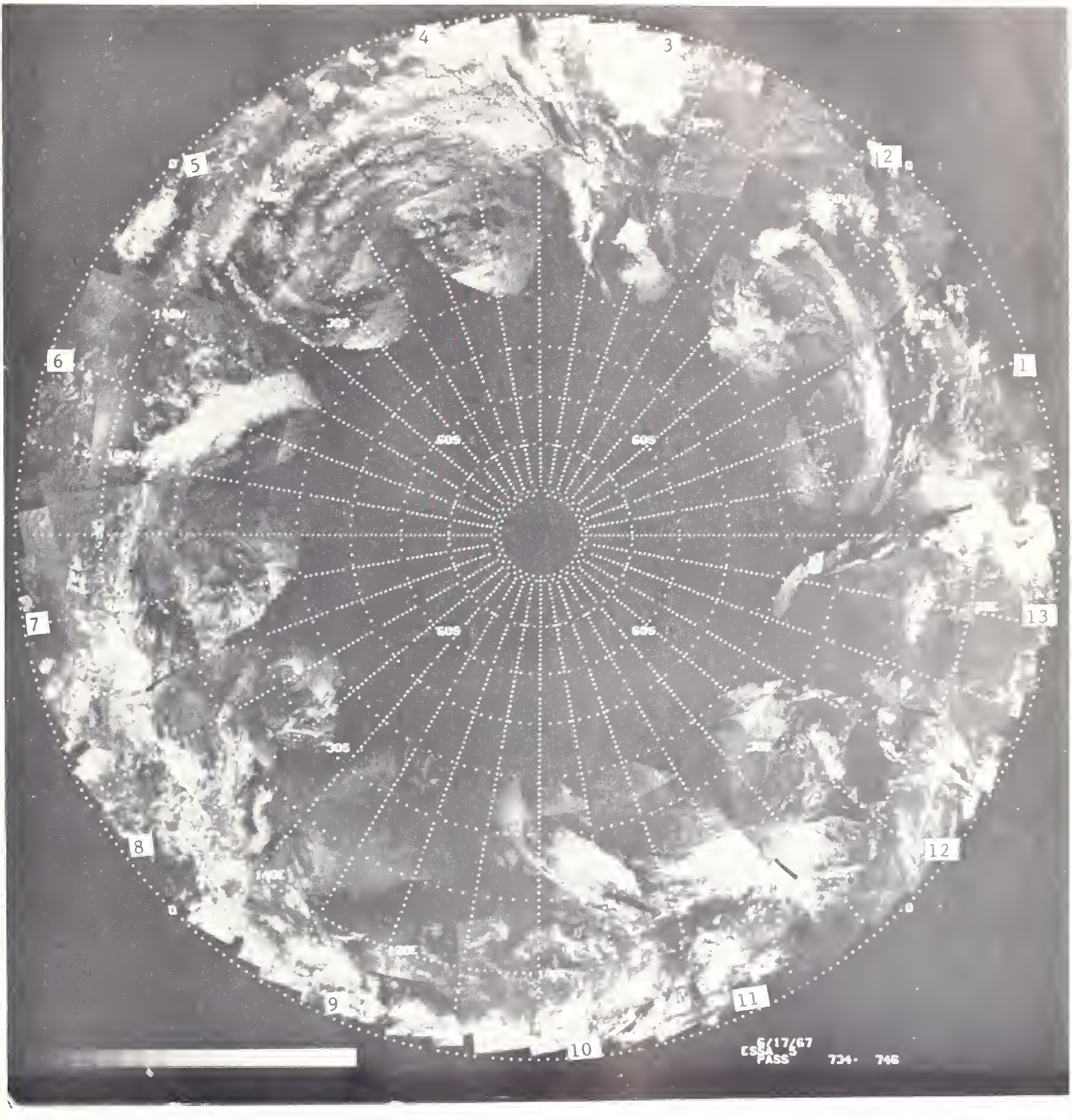
4
3
40W
30N
6/17/67
ESSA 5
PASS 734- 746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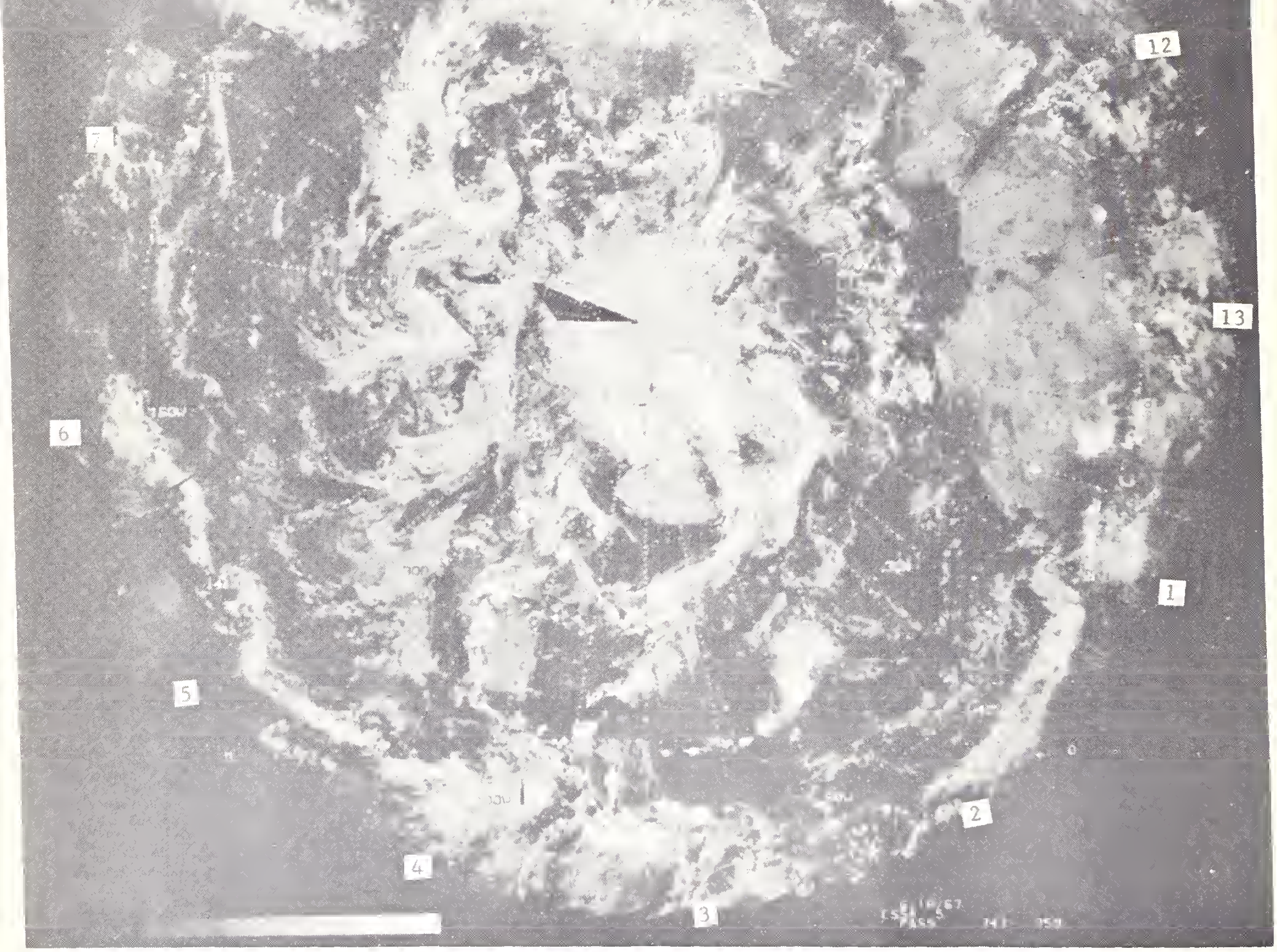
140W
100W
30S
60S
60S
60S
60S
30S
30S
140E
100E
20E
6/17/67
ESSA 5
PASS 734- 746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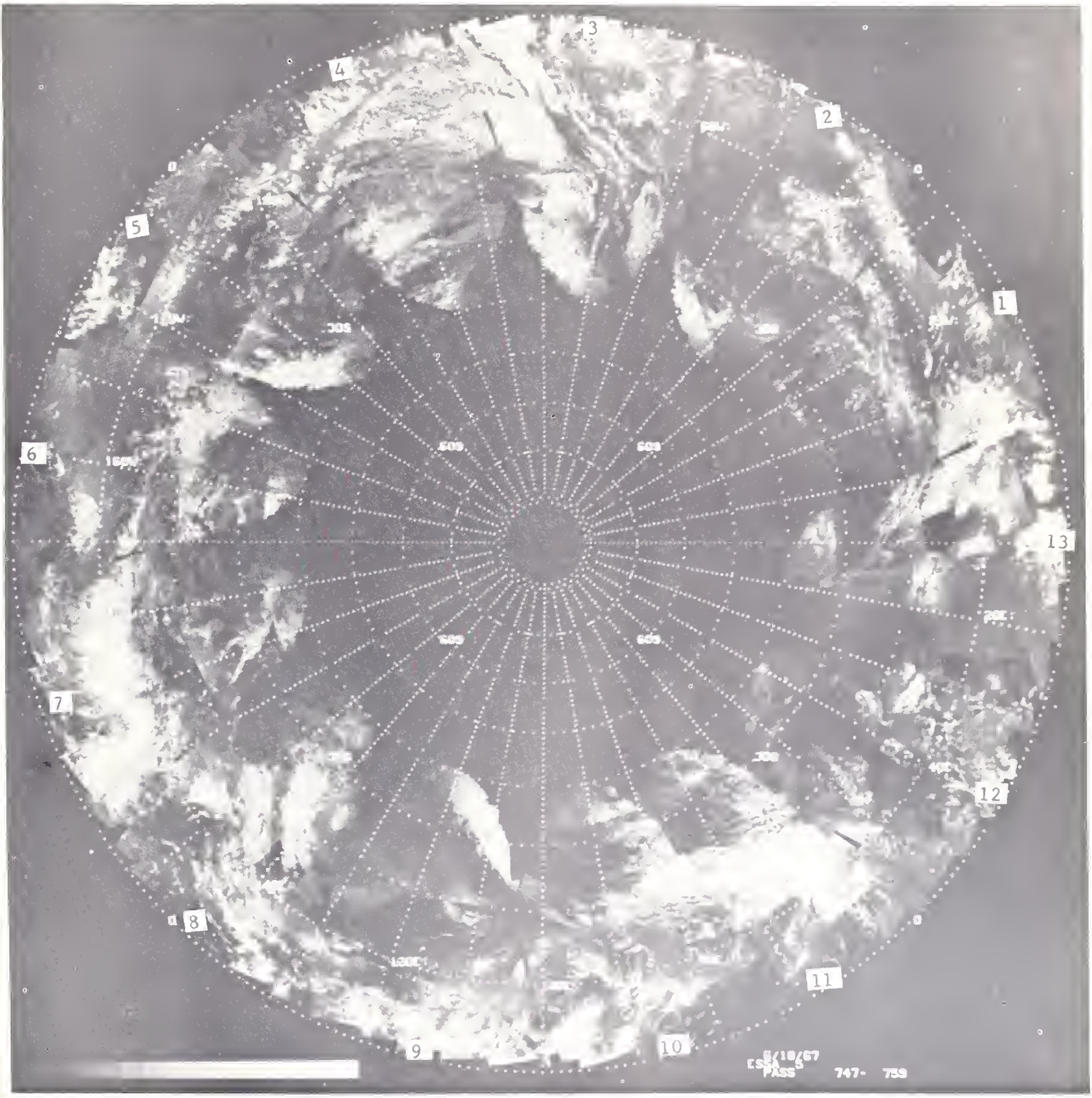
80
60E
160W
30W
0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30S
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60S
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160W
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20E
60S
12
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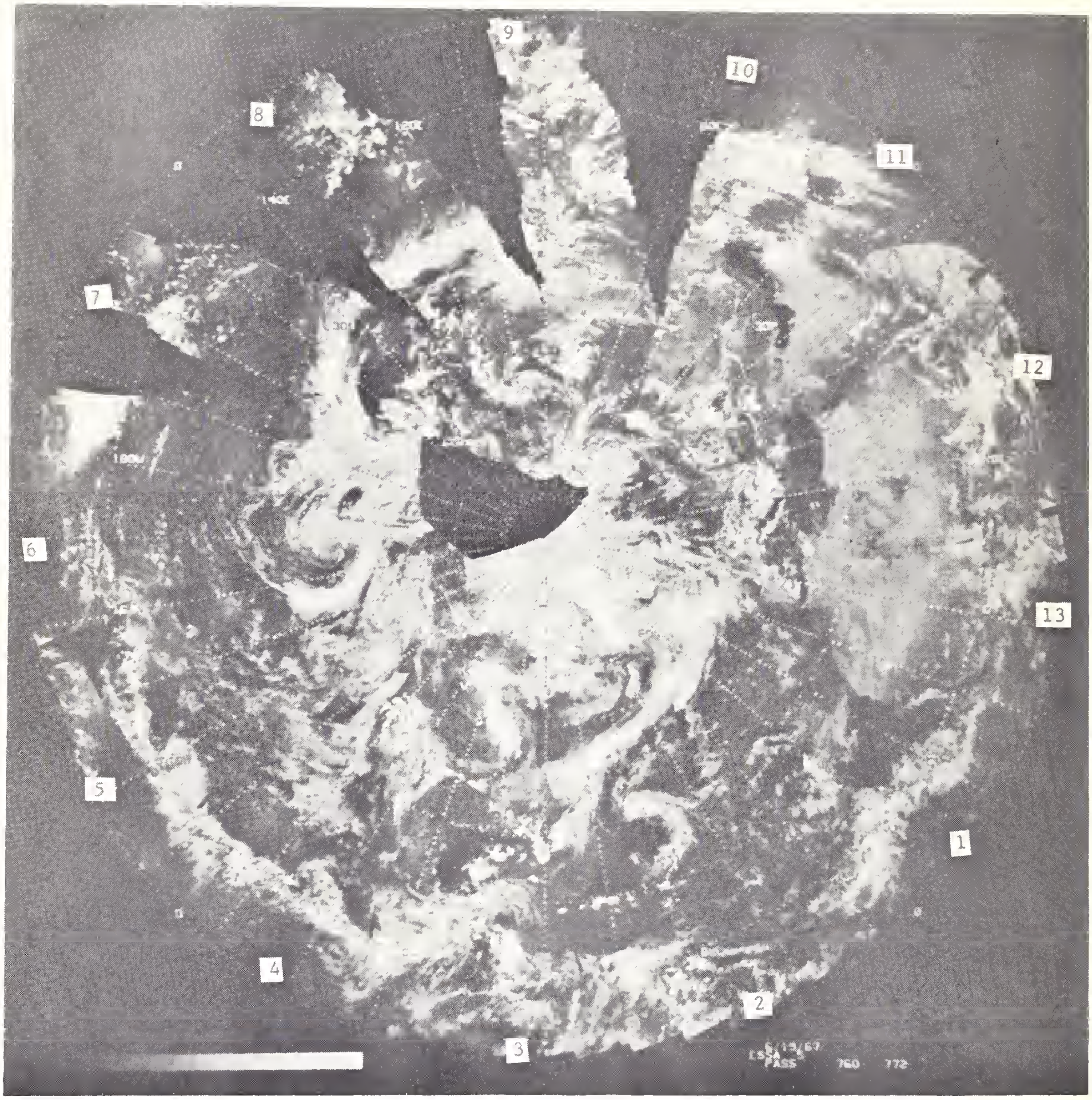
10
8/18/67
ESSA 5
PASS 747- 759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120E
140E
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12
180W
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13
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1
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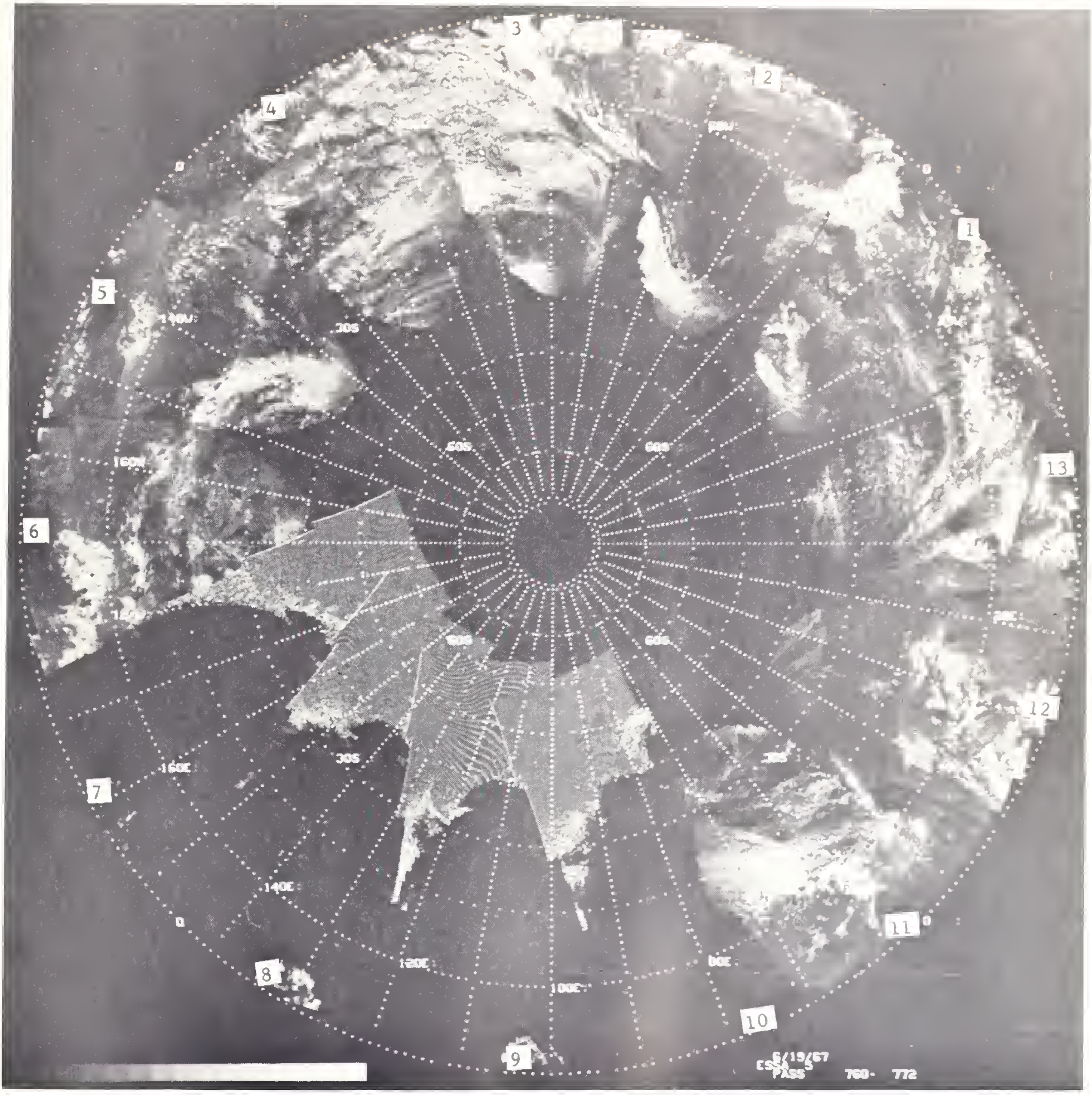
2
3
6/15/67
ESSA 5
PASS 760 772



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80W
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140W
30S
60S
60S
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160W
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60S
60S
20E
12
30S
30S
160E
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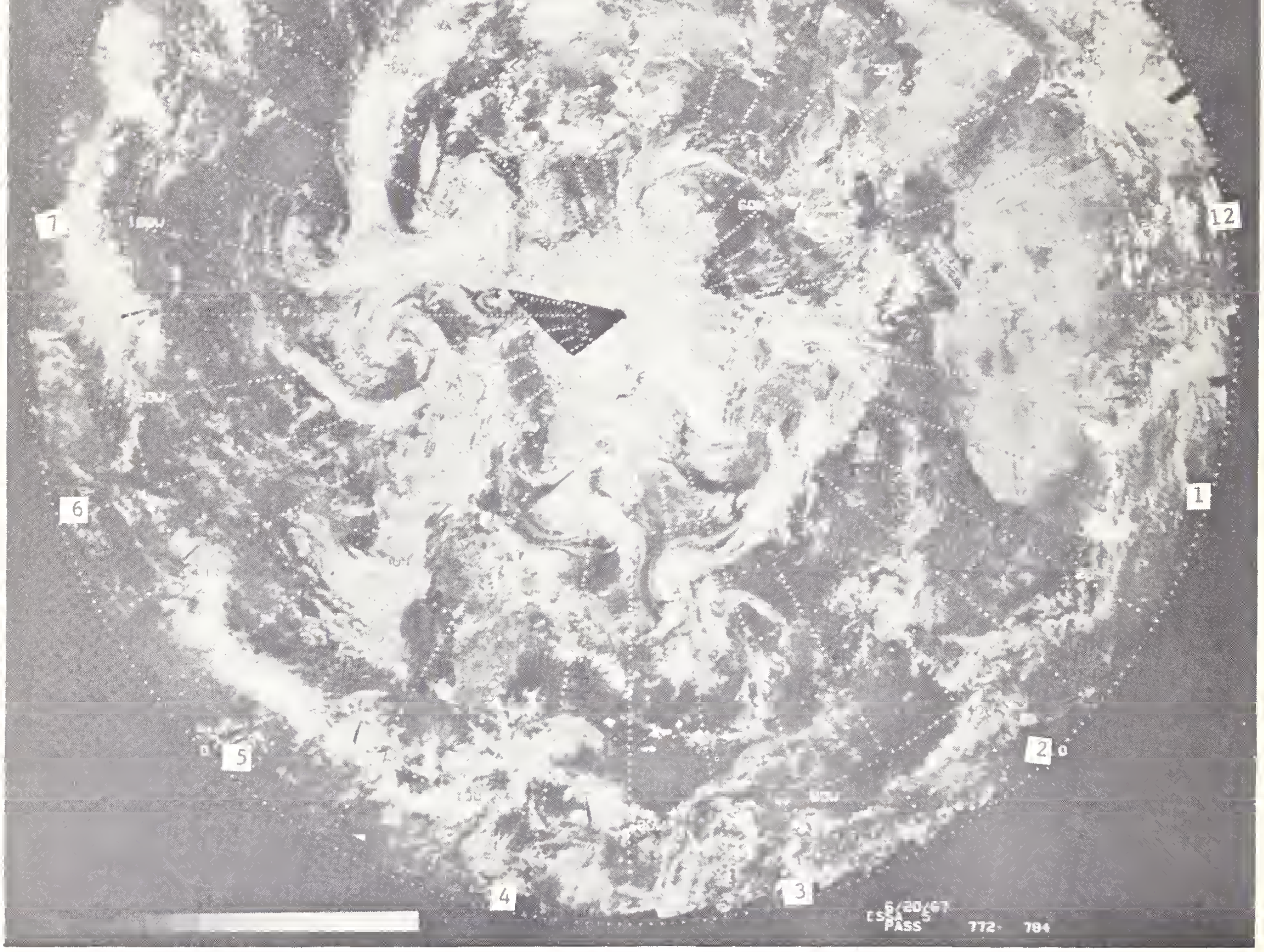
11
0
8
120E
80E
100E
10
9
6/19/67
ESSA 5
PASS 760- 772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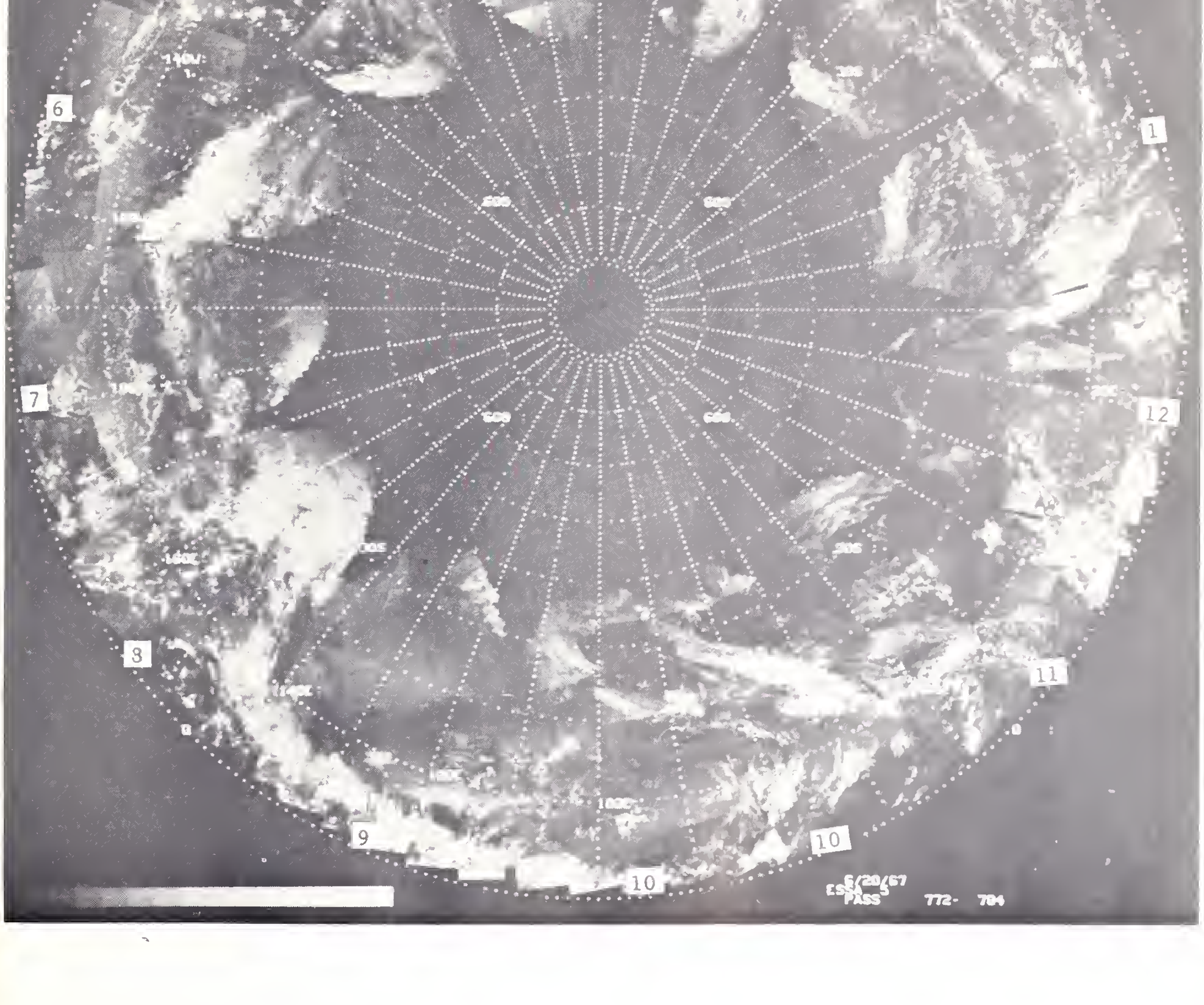
3
6/20/67
ESSA 5
PASS 772- 784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3
90W
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140W
6
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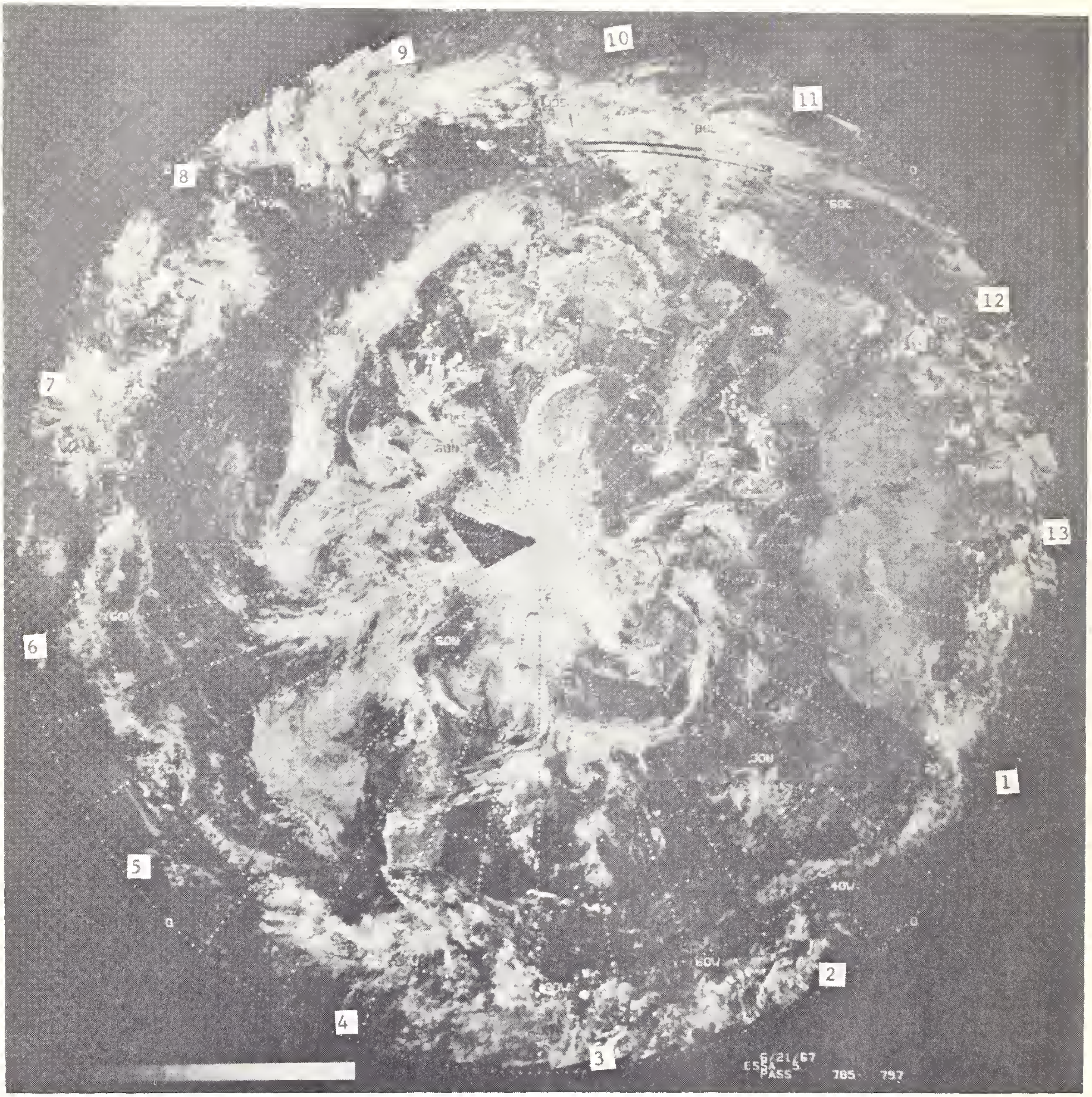
12
140E
8
100E
11
9
10
10
6/20/67
ESSA 5
PASS 772- 784


9
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60E
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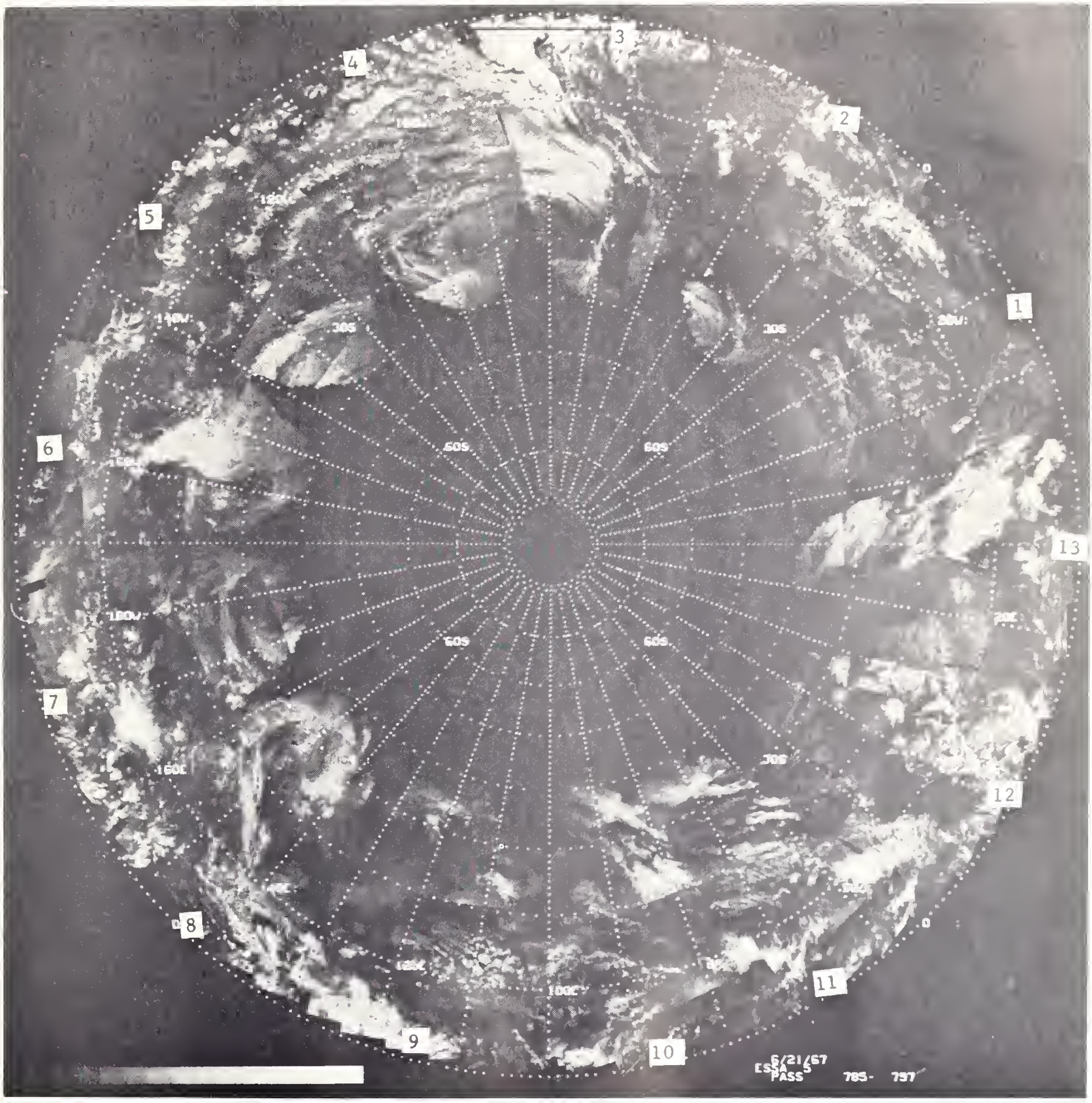
40W
2
60W
4
3
6/21/67
ESSA 5
PASS 785 797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9
10
120W
140W
160W
180W
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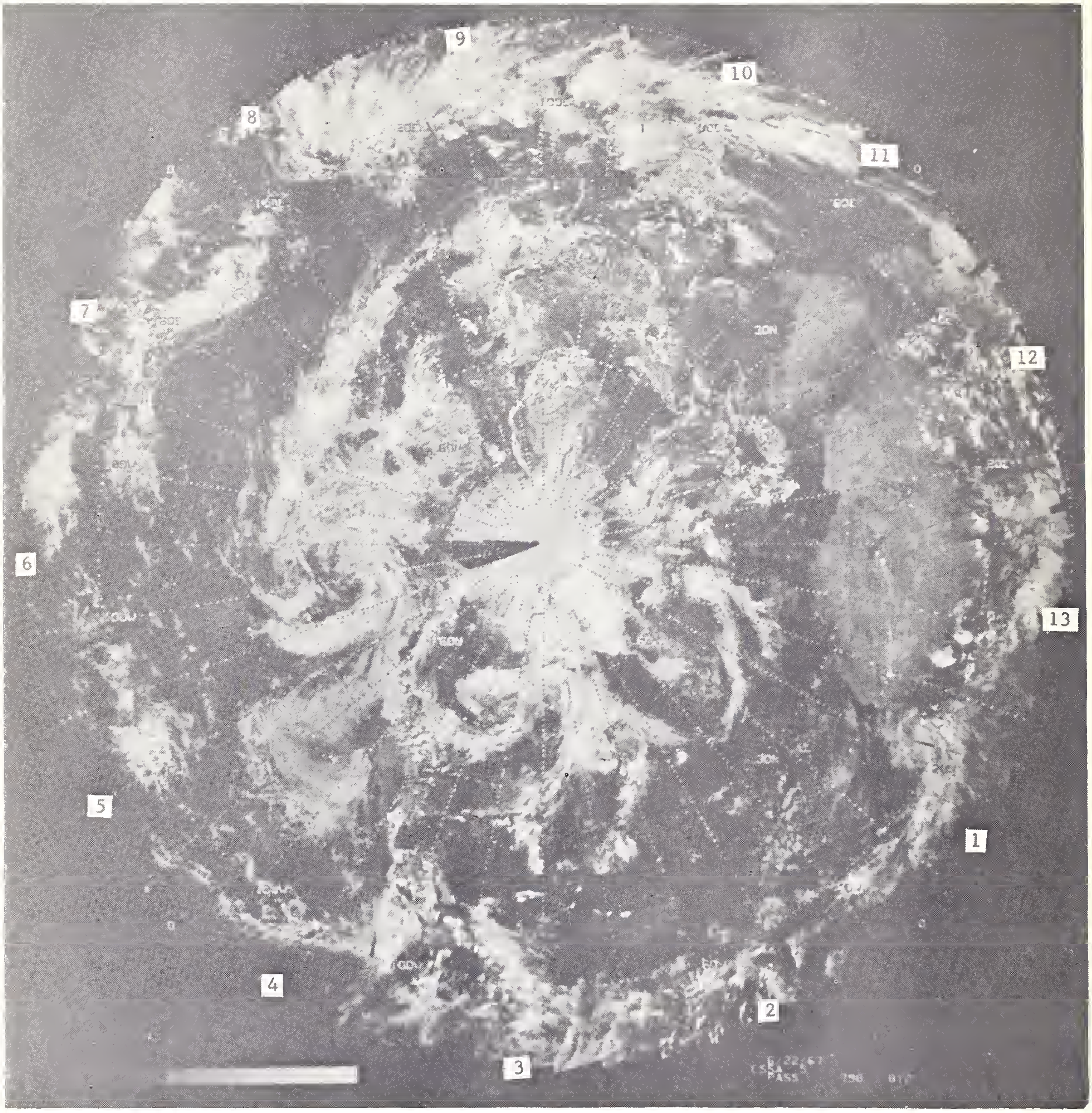
140E
120E
100E
80W
20E
30S
60S
6/21/67
ESSA 5
PASS 785- 797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1
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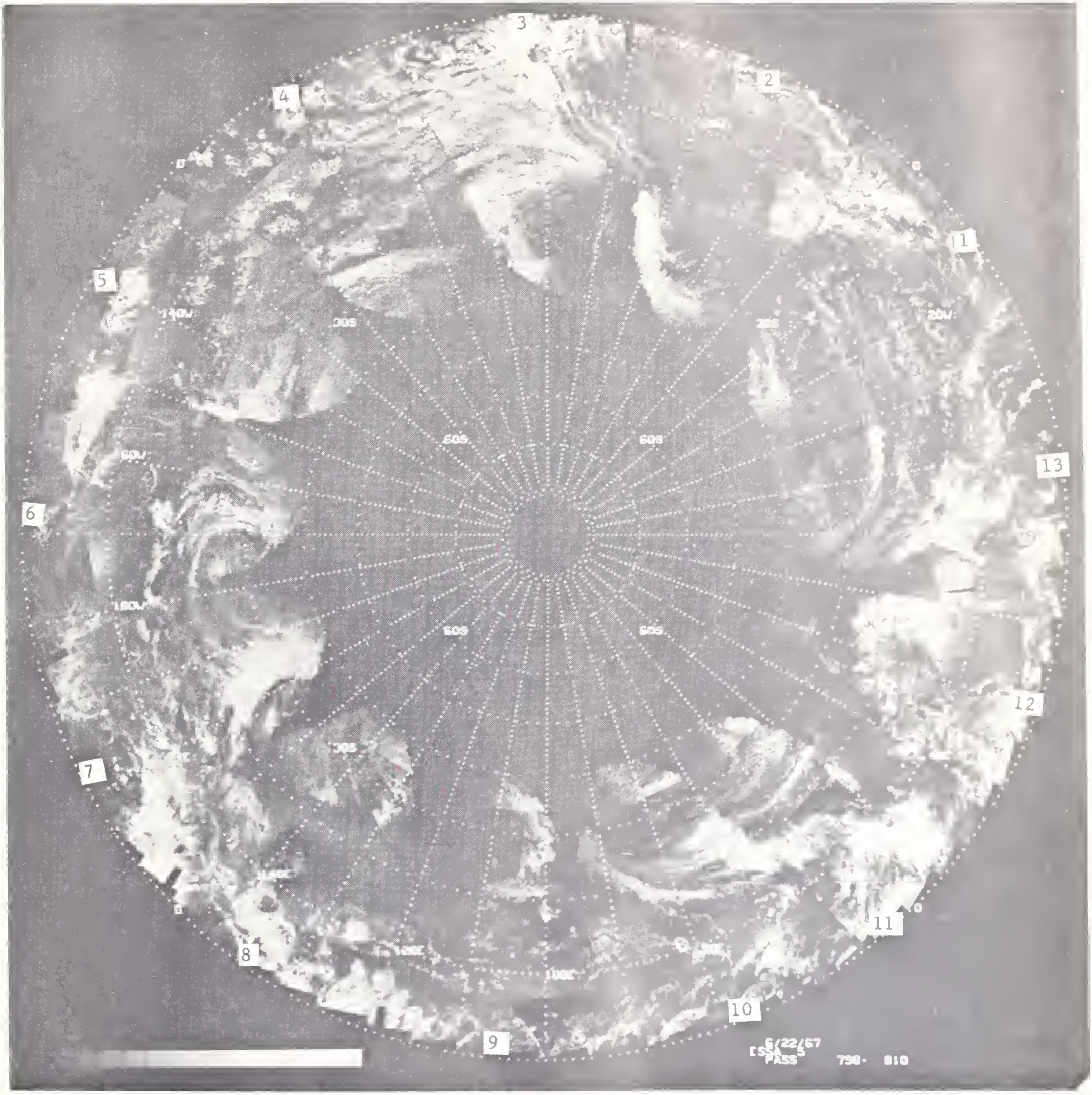
3
6/22/67
ESSA 5
PASS 798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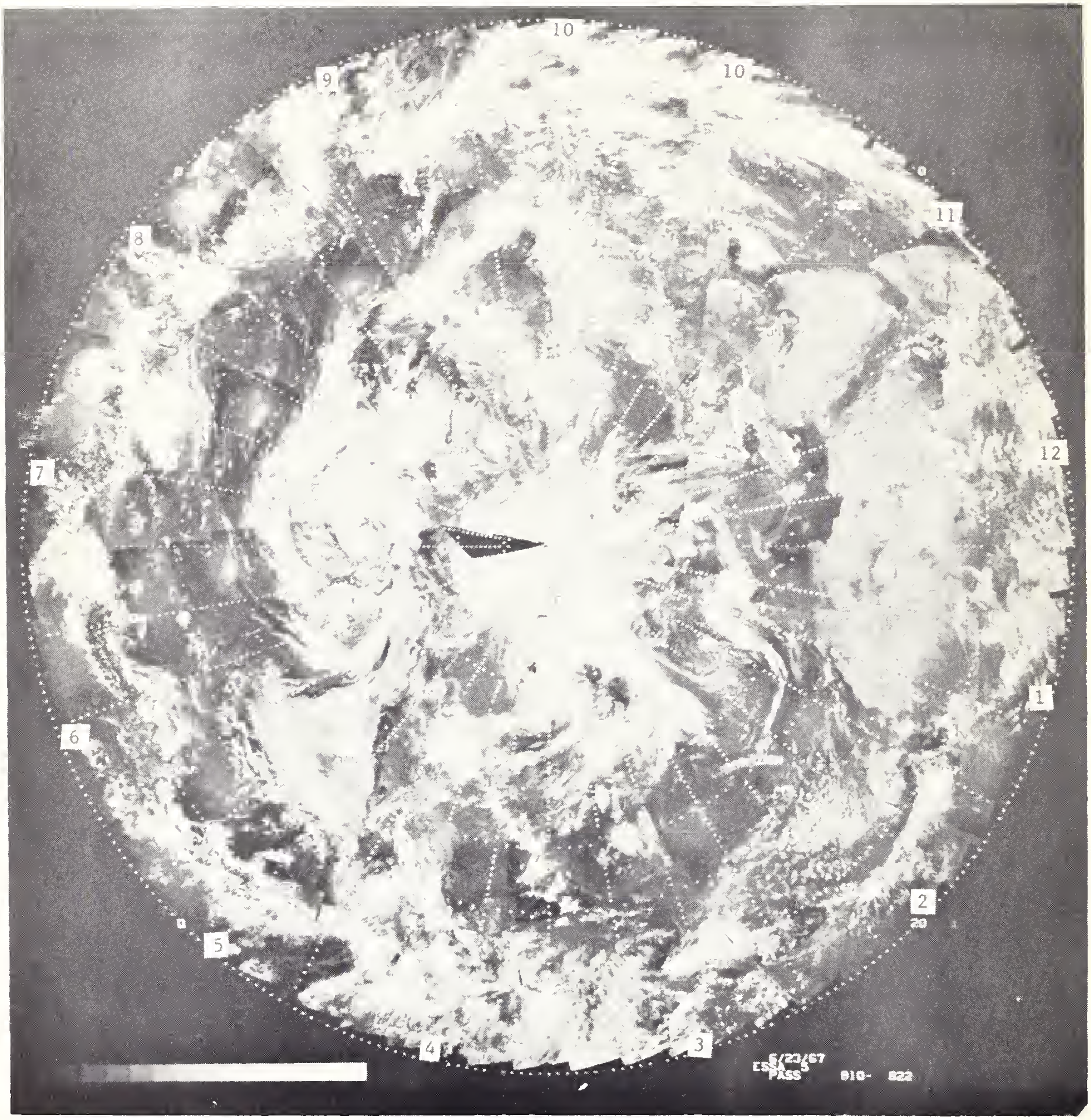
140W
30S
30S
20W
60S
60S
60W
13
6
180W
60S
60S
12
7
30S
140E
11
8
100E
60E
10
9
6/22/67
ESSA 5
PASS 798- 810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20
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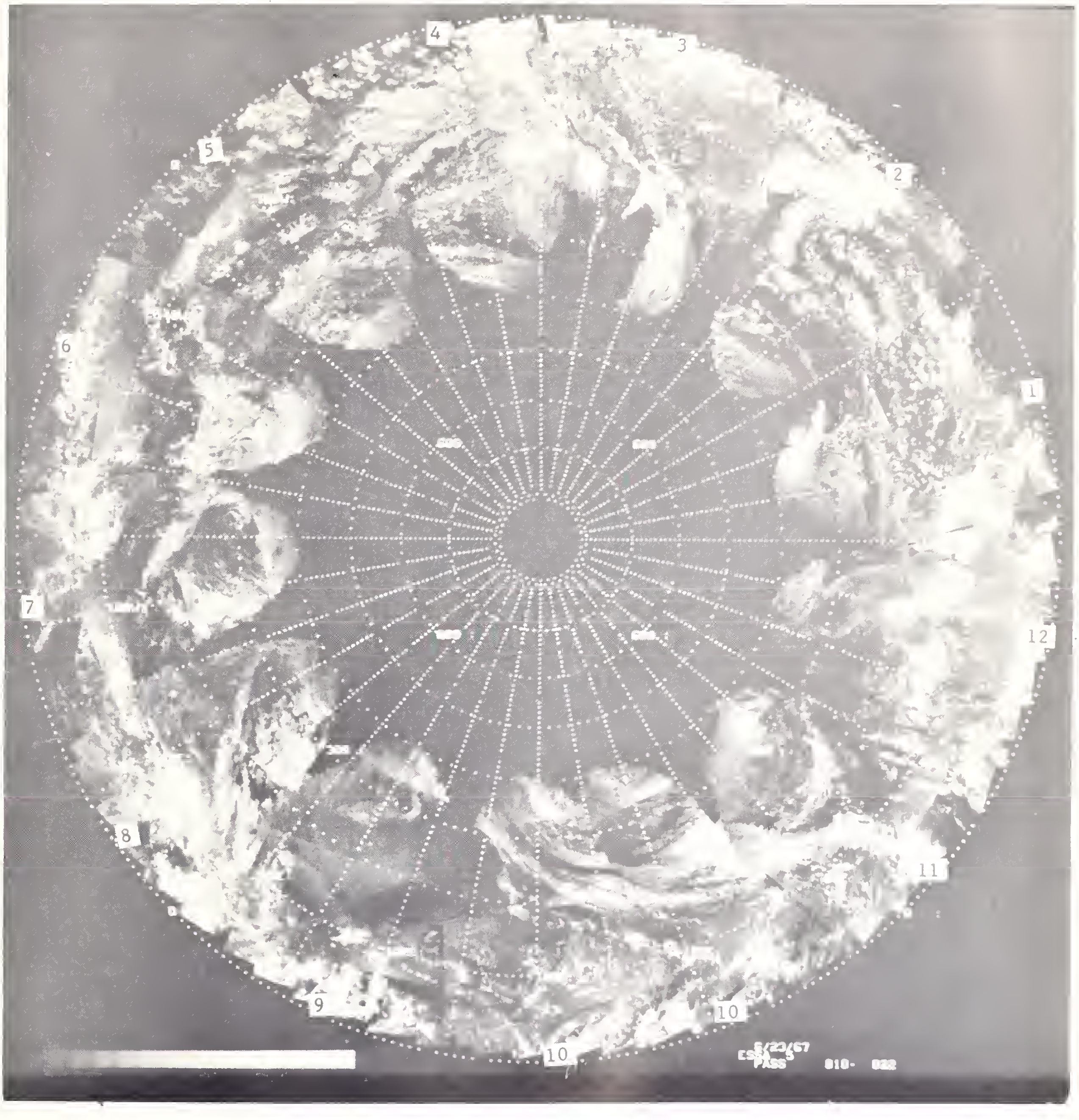
4
3
6/23/67
ESSA 5
PASS 810- 822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2
6
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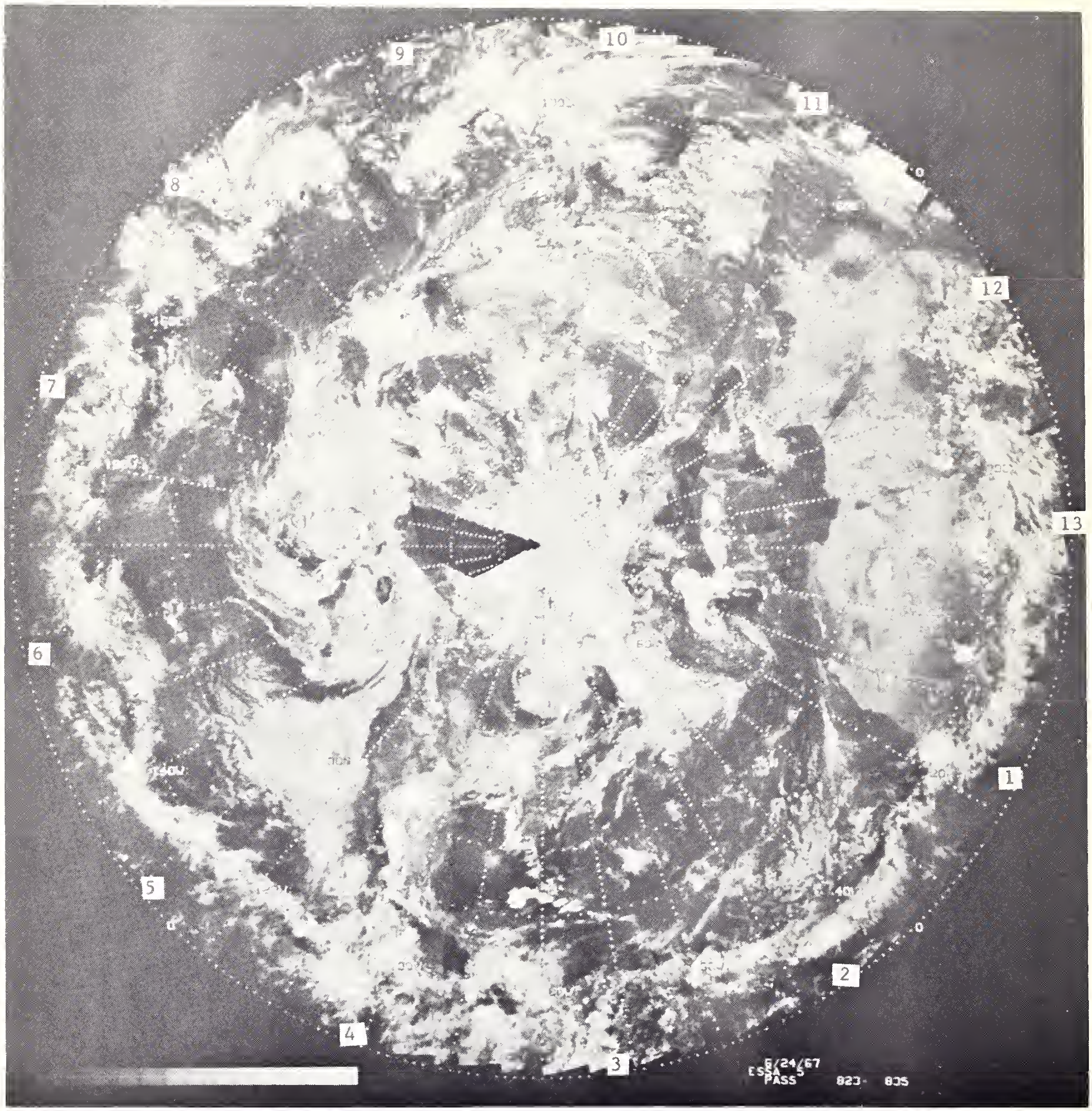
12
8
11
9
10
10
5/23/67
ESSA 5
PASS
810- 822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12
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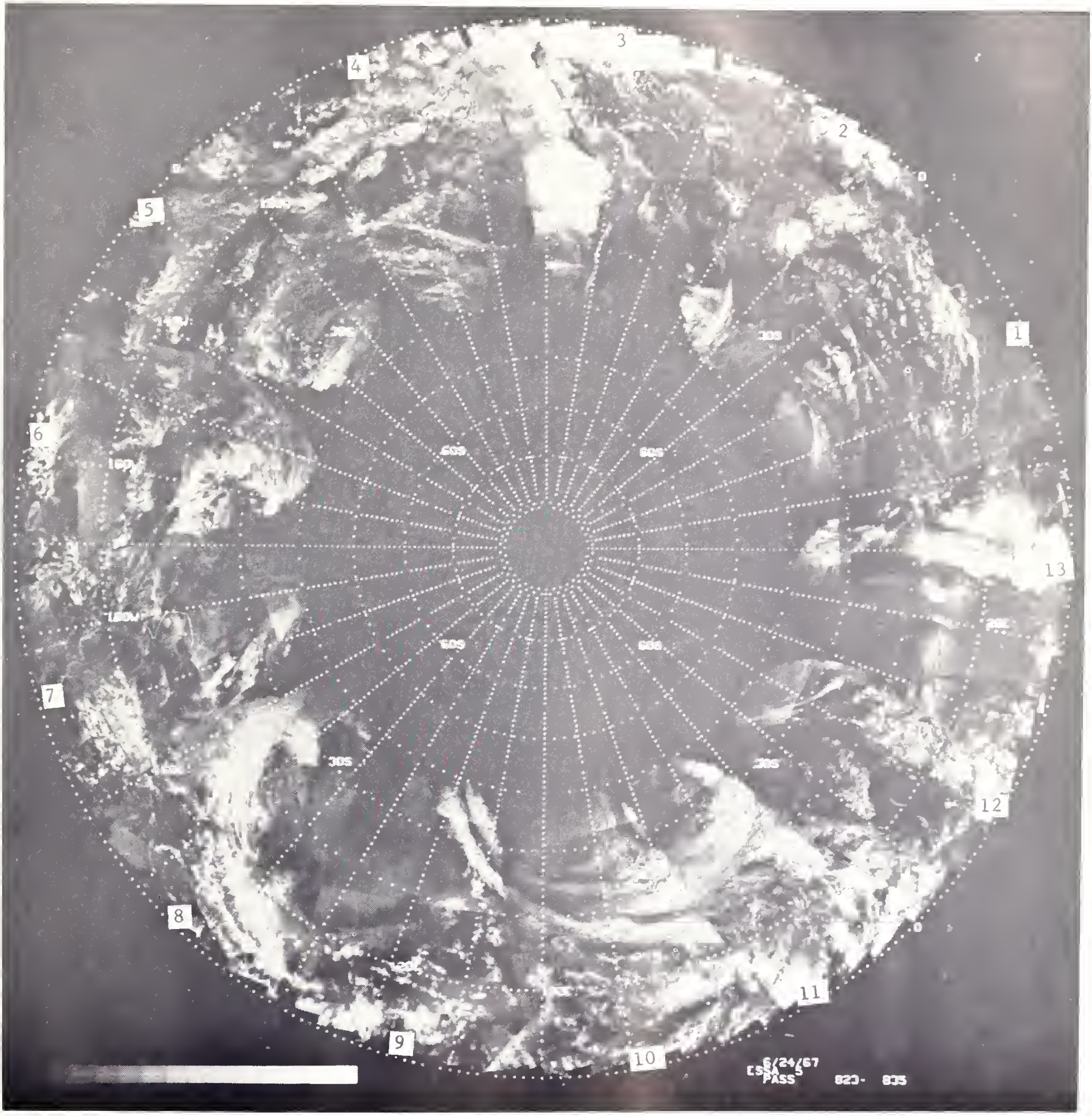
6
1
5
2
4
3
8/24/67
ESSA 5
PASS
823 - 835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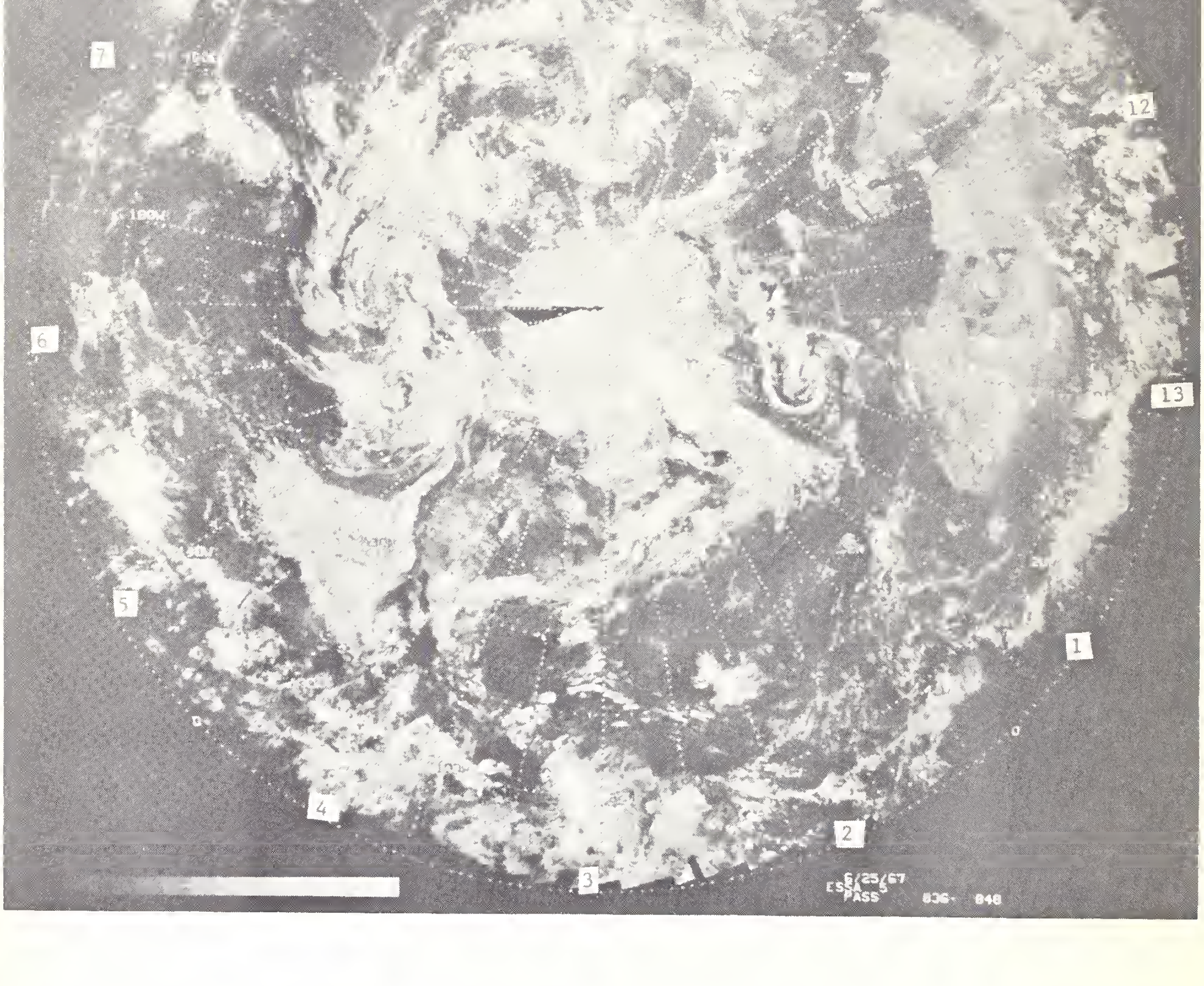
30S
60S
60S
30S
30S
60S
60S
30S
6/24/67
ESSA 5
PASS 823- 835


9
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180W
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13
60W
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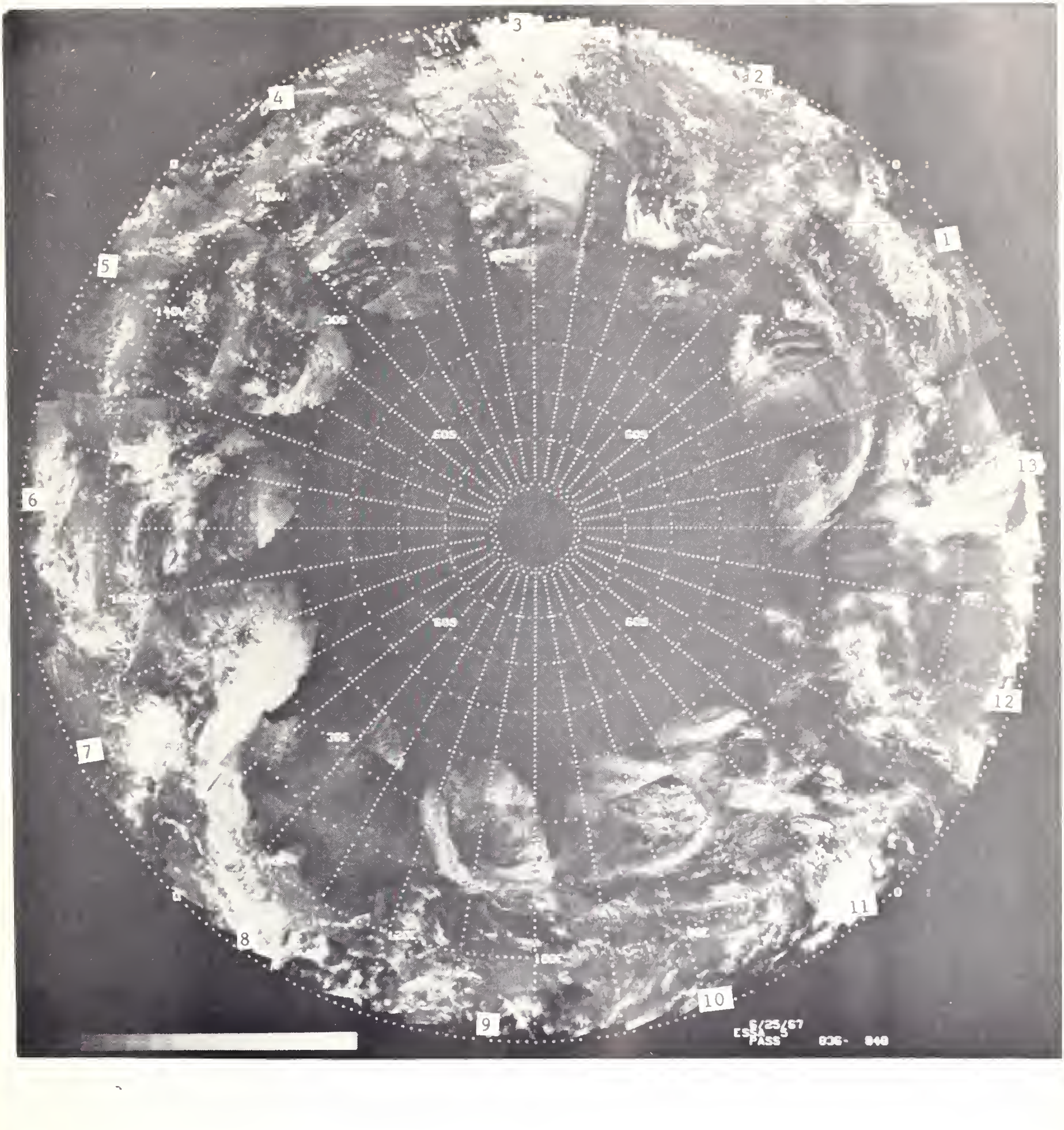
1
4
2
3
6/25/67
ESSA 5
PASS 836- 848


3
2
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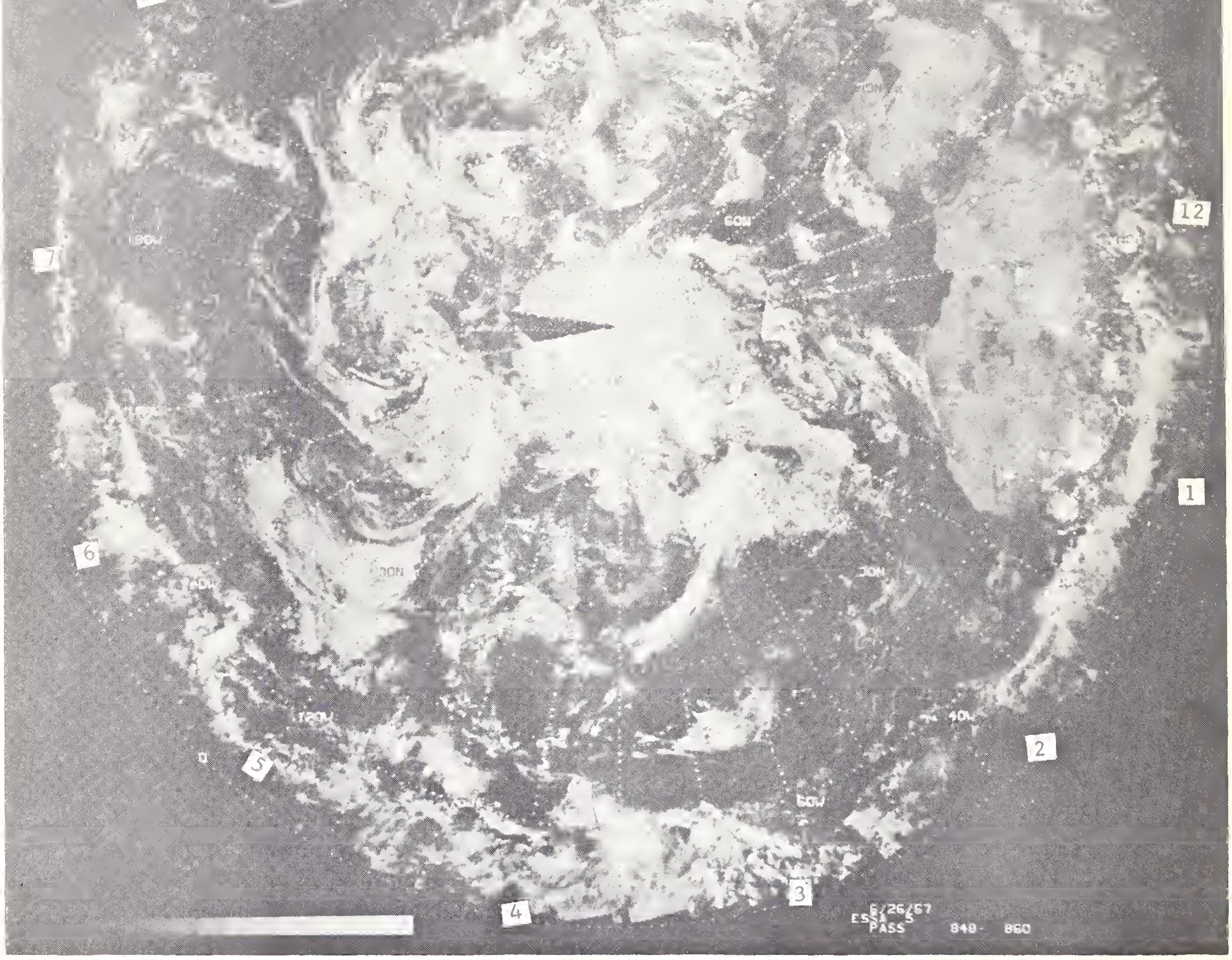
30S
140W
60S
60S
13
6
60S
60S
12
7
30S
11
8
120E
160E
10
9
6/25/67
ESSA 5
PASS
836- 840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9
11
8
12
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180W
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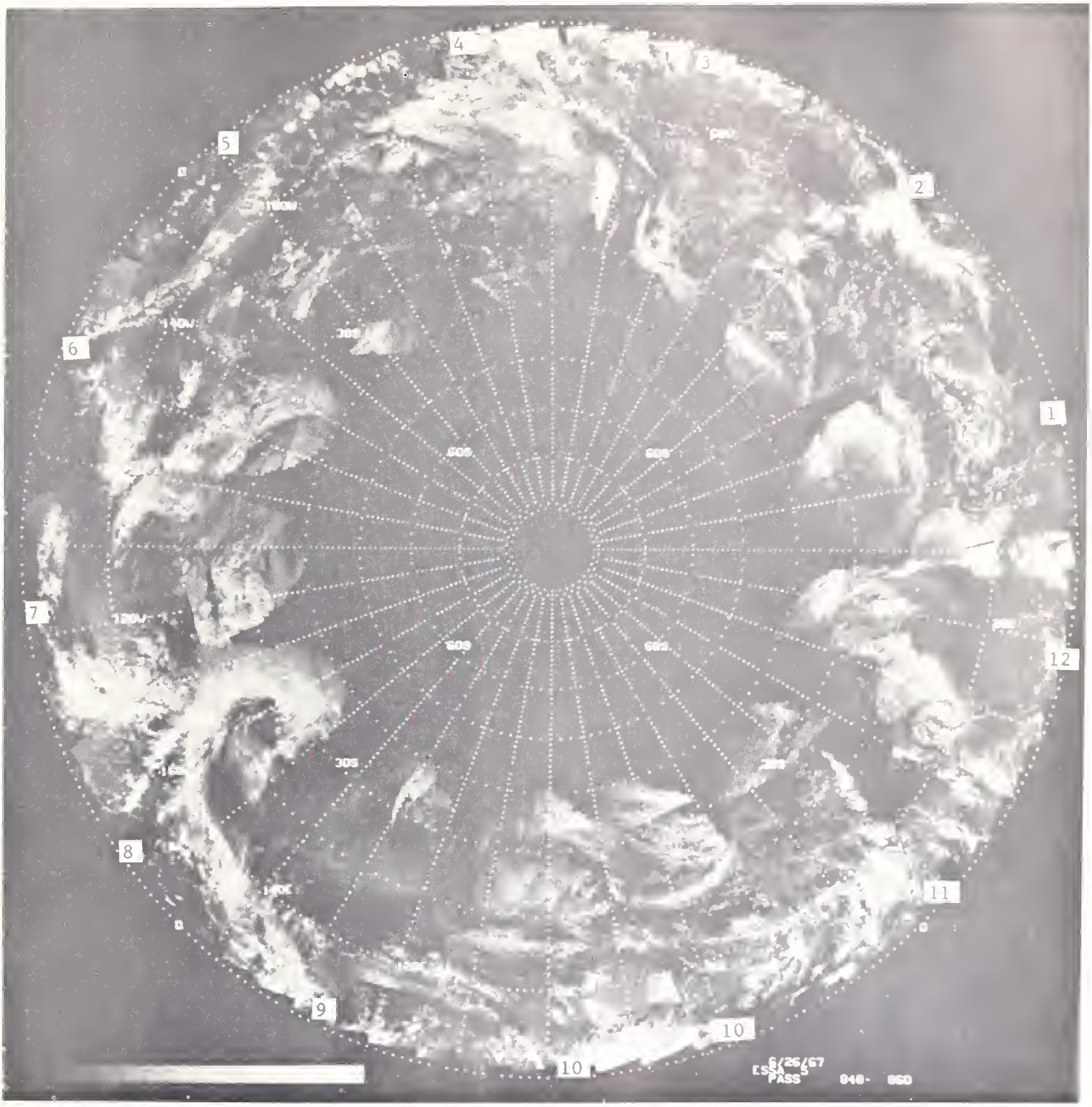
30N
1
6
120W
40W
60W
2
5
3
4
6/26/67
ESSA 5
PASS 848- 860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2
160W
140W
30S
30S
6
1
60S
60S
7
120W
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60S
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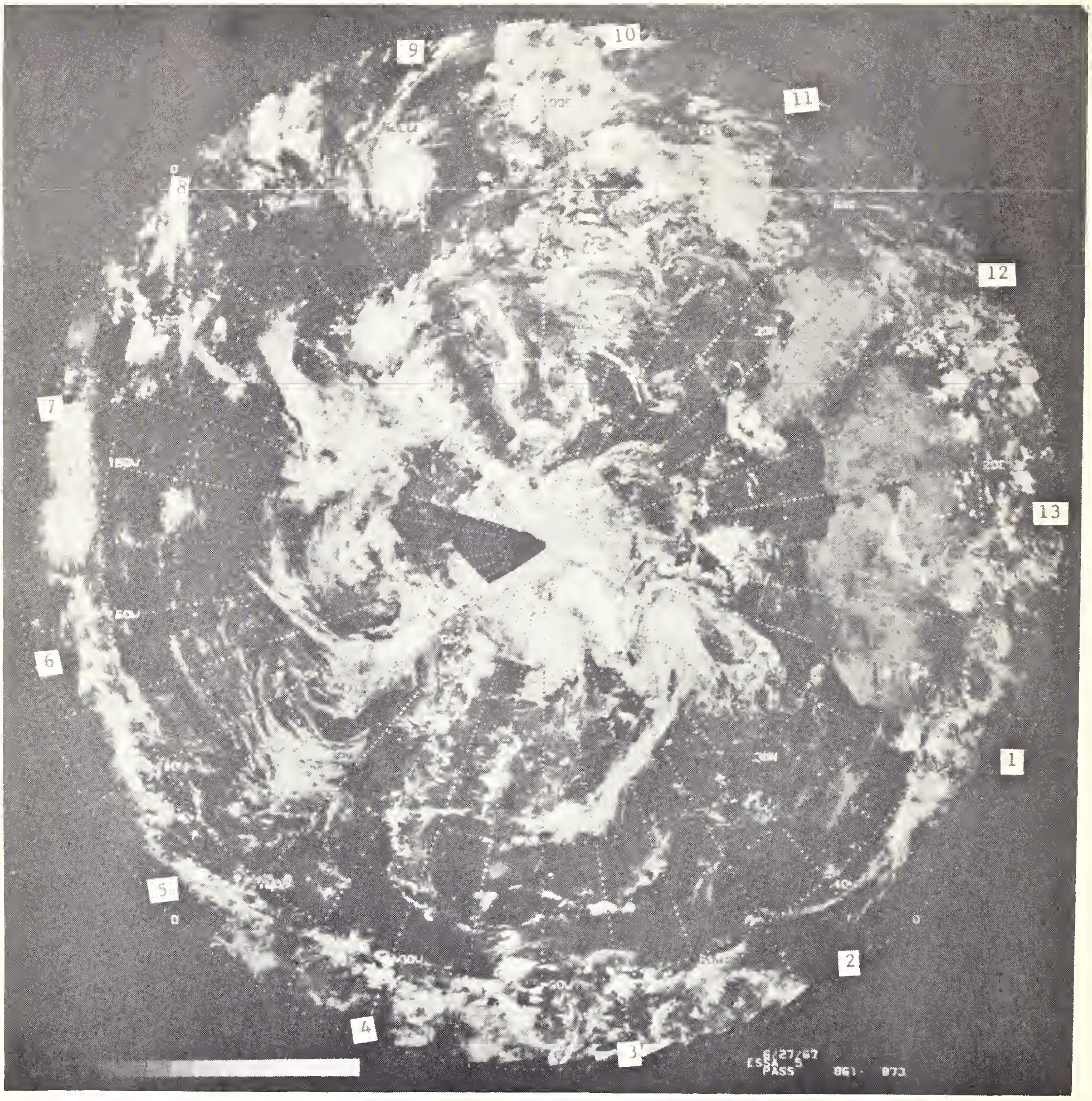
10
6/26/67
ESSA 5
PASS
848- 860


9
10
11
8
12
7
180W
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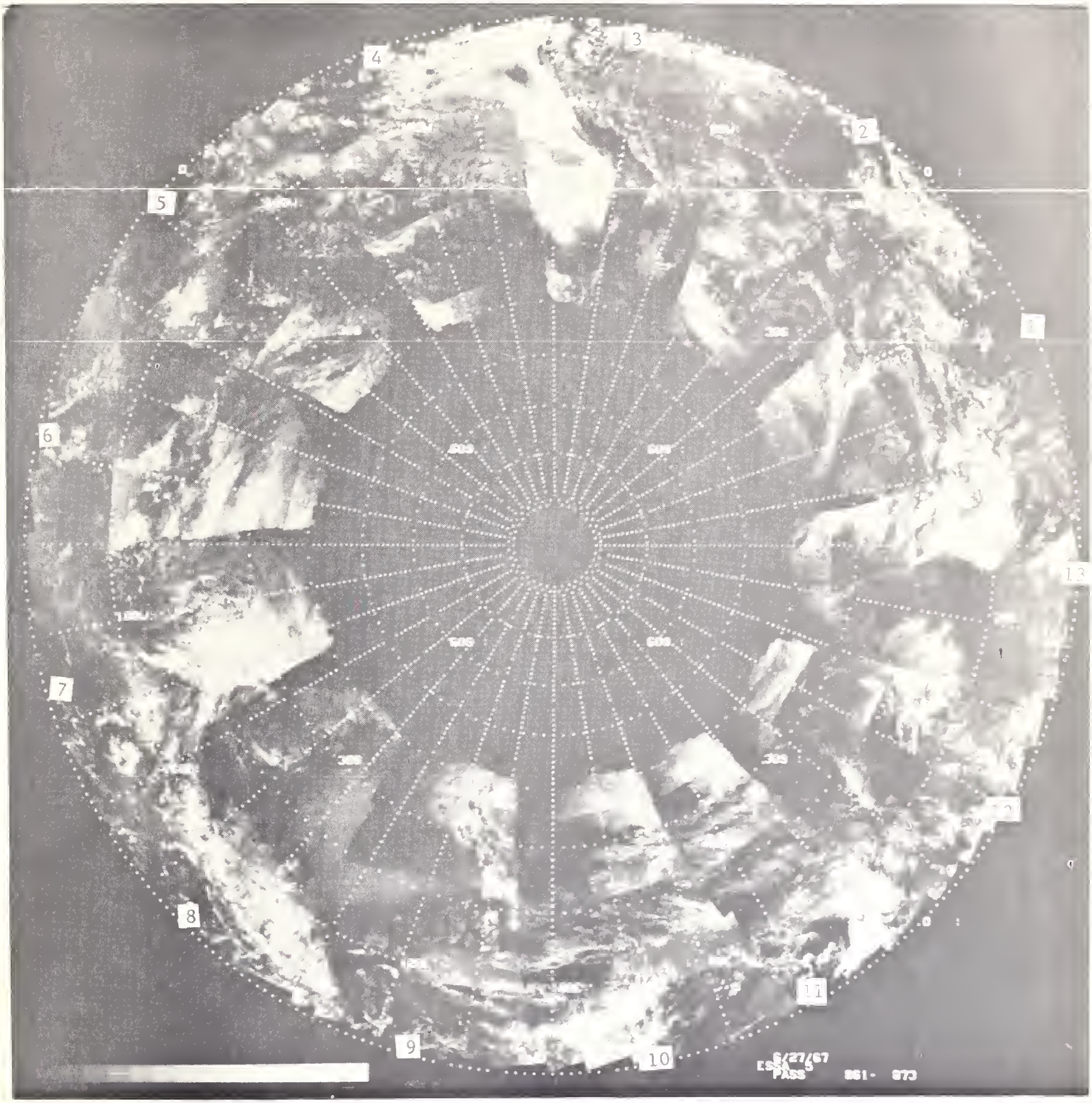
160W
6
1
30N
5
2
4
3
6/27/67
ESSA 5
PASS 861 - 873


3
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0
1
30S
60S
60S
6
13
60S
60S
180W
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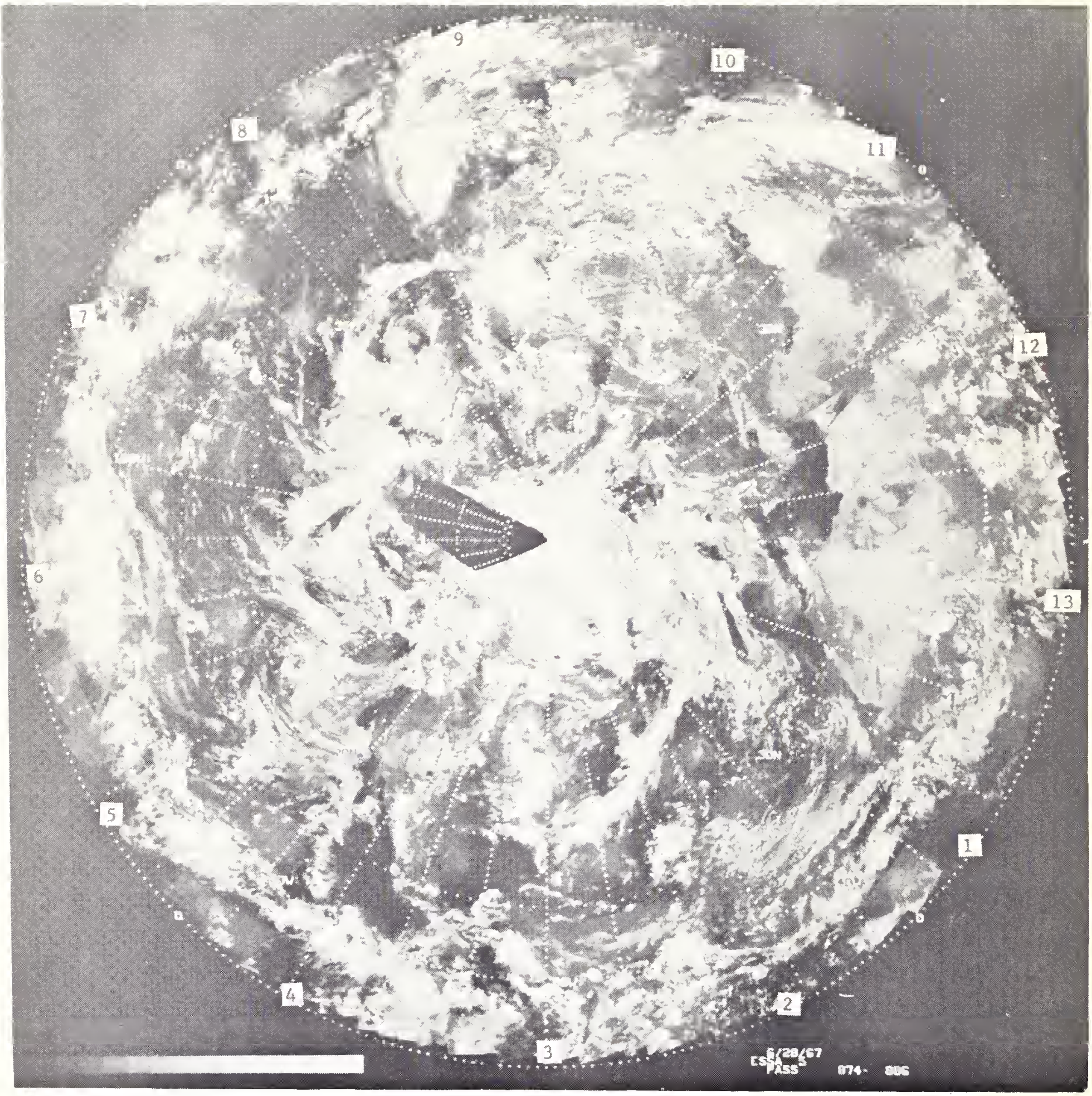
30S
30S
12
8
0
11
9
10
6/27/67
ESSA 5
PASS 861- 873


9
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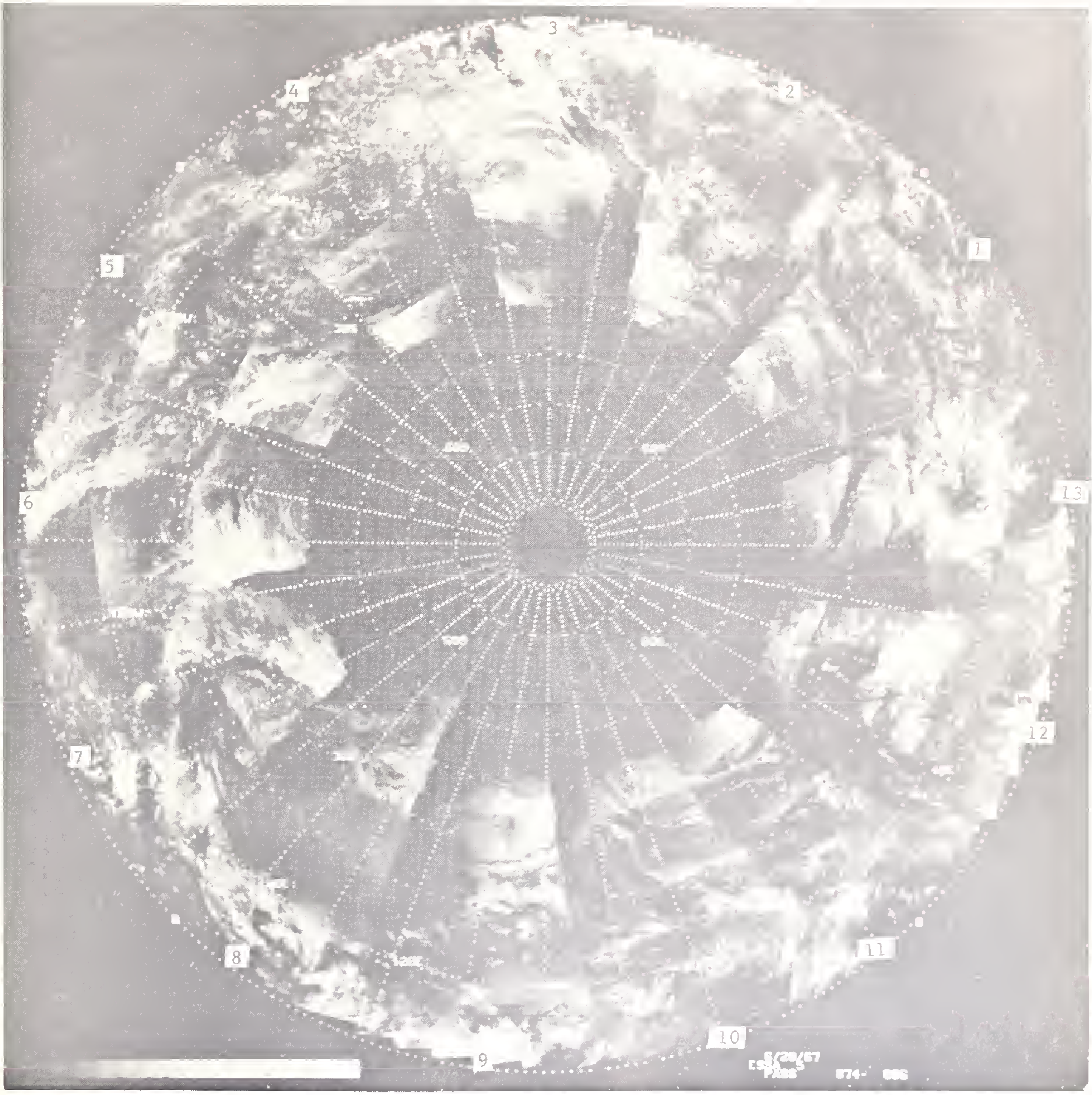
3
6/28/67
ESSA 5
PASS 874- 886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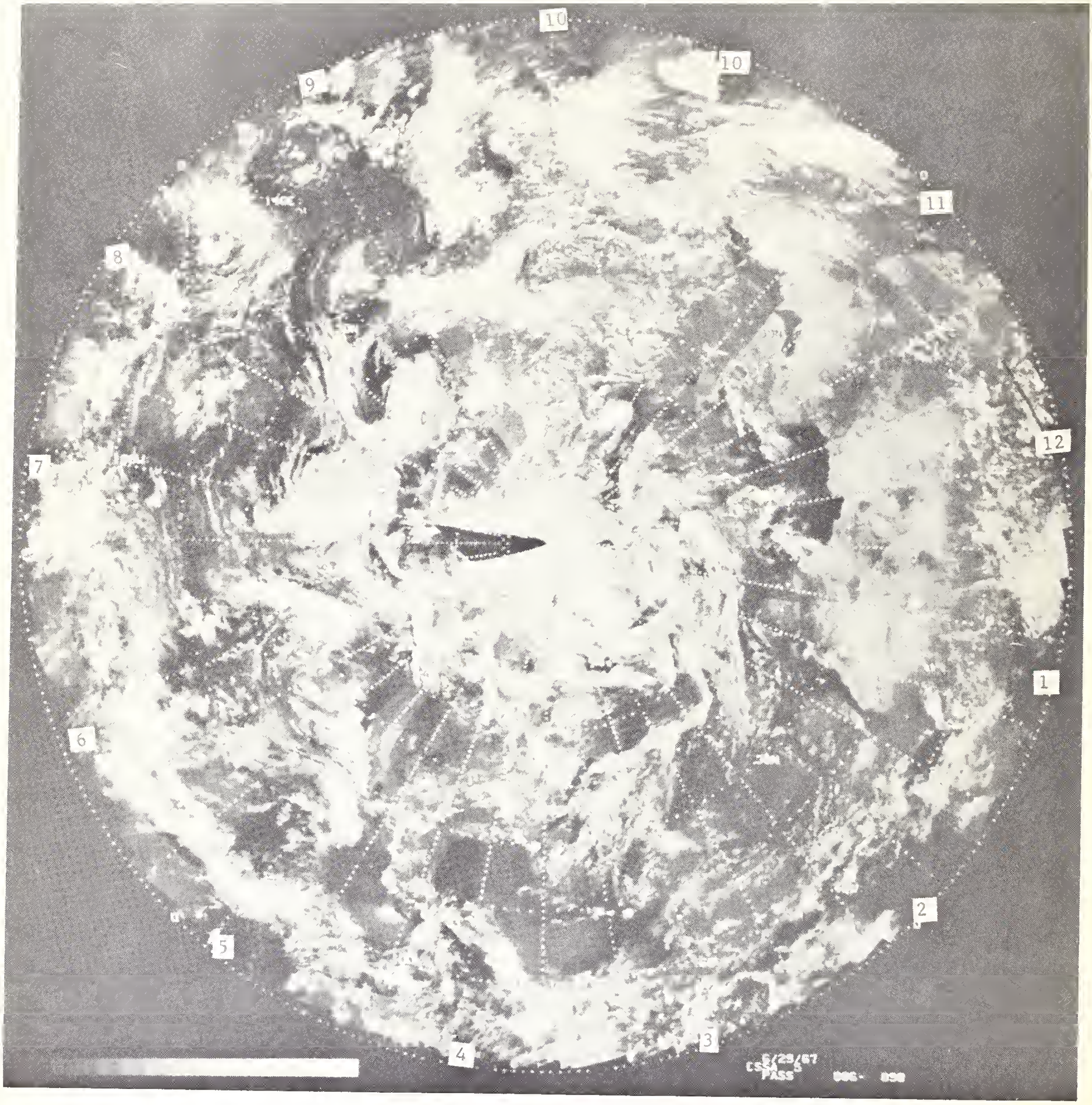
9
5/28/67
ESSA 5
PASS
874-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6/29/67
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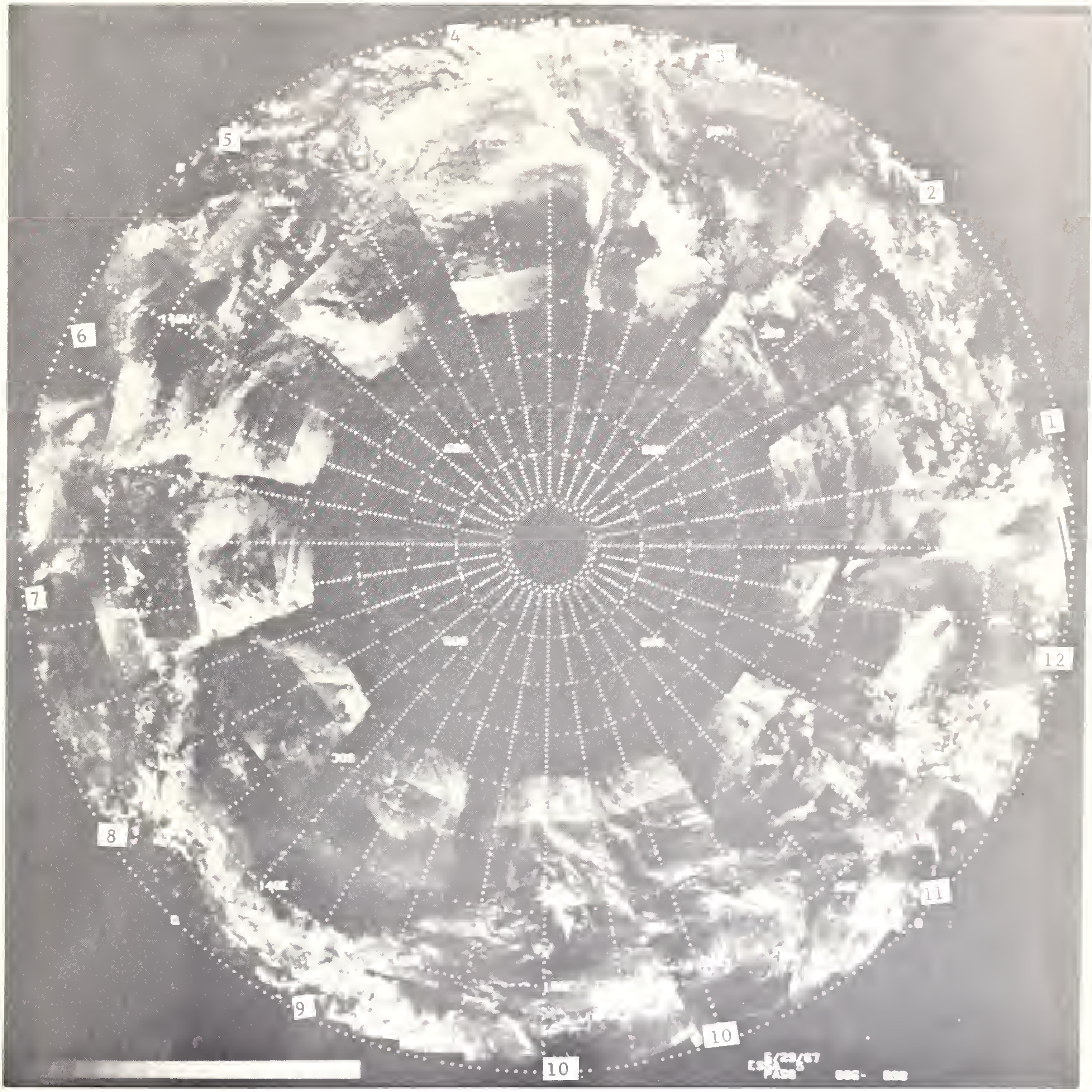
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7
12
8
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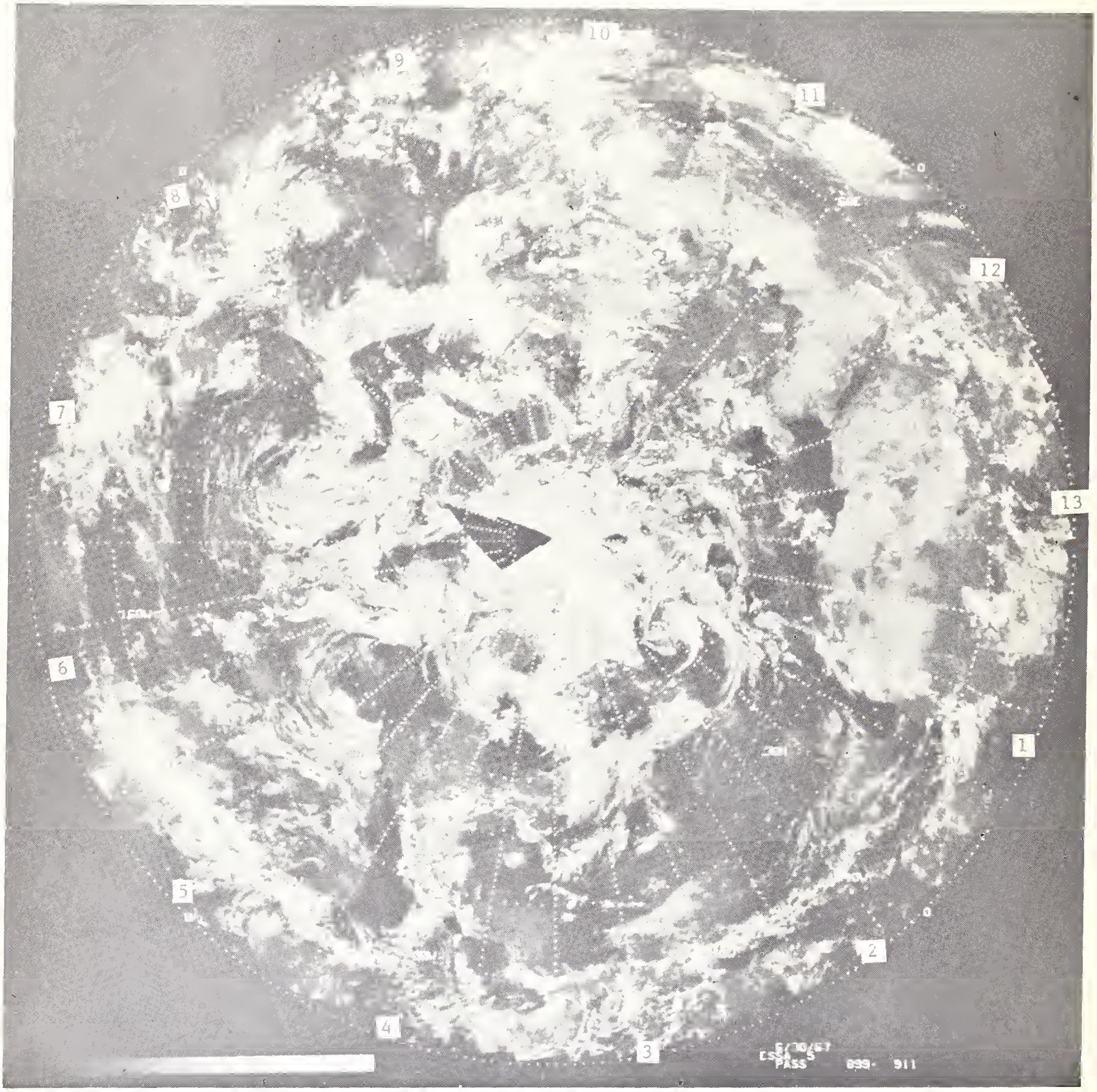
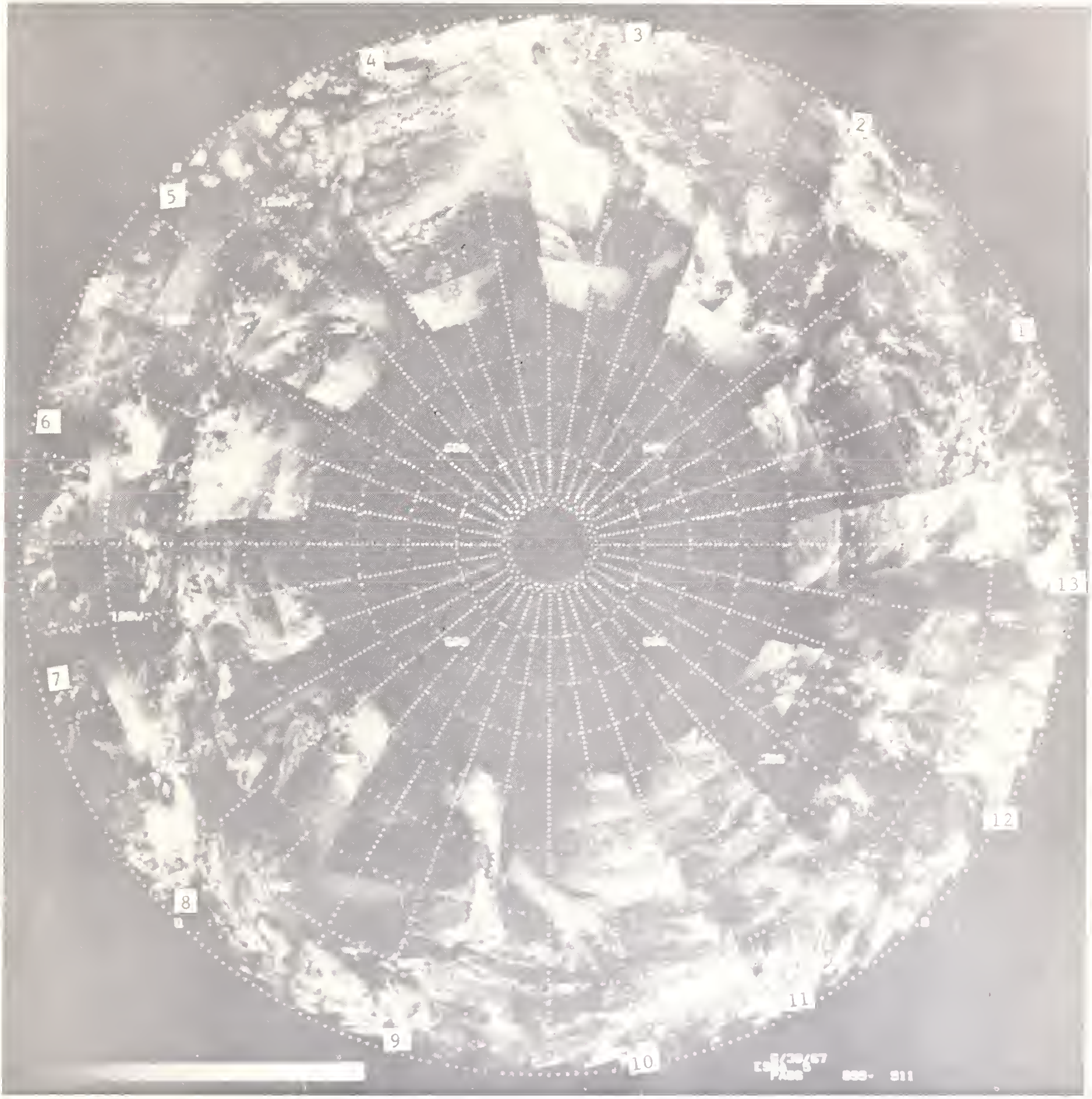
11
9
10
10
5/29/67
ESSA 5
PASS


10
9
11
8
12
7
13
160W
6
30N
1
5
2
4
3
5/30/67
ESSA 5
PASS 899- 911


13
4
2
5
1
6
13
7
12
8
11
9
10
PASS

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